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Contribution by indigenous peoples

Water, sanitation and human settlements*

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* Prepared by the Tebtebba Foundation (Indigenous Peoples' International Centre for Policy Research and Education) and the Indigenous Environmental Network in consultation with indigenous peoples' organizations.

I. Introduction

1. Indigenous peoples welcome the implementation review on the thematic issues of human settlements, water and sanitation at the twelfth session of the Commission on Sustainable Development, with a focus on identifying constraints, obstacles, successes and lessons learned in the implementation process. The year 2004 coincides with the culmination of the International Decade of the World's Indigenous People, and this review will contribute to a deeper understanding about the policies, approaches and actions which affect the sustainable development of indigenous peoples.

2. Ten years after Rio, the World Summit on Sustainable Development strongly reaffirmed commitments to the Rio principles, the full implementation of Agenda 21, the Programme for the Further Implementation of Agenda 21 and the Johannesburg Plan of Implementation. In the Johannesburg Declaration on Sustainable Development, the world's political leaders stated: "We reaffirm the vital role of indigenous peoples in sustainable development."

3. The relevant commitments made in chapter 26 of Agenda 21 on strengthening the role of indigenous people and their communities, states: In view of the interrelationship between the natural environment and its sustainable development and the cultural, social, economic and physical well-being of indigenous people, national and international efforts to implement environmentally sound and sustainable development should recognize, accommodate, promote and strengthen the role of indigenous people and their communities.

4. Human settlements, water and sanitation cover a complex of social and ecological interrelationships, between peoples and with the Earth. Human settlements are cultural homes within our larger ecological home, the Earth. Water is a basic element of this planet and therefore of life. Sanitation is critical to maintaining the health, well-being and life of peoples and nature.

5. The present background paper on indigenous peoples, human settlements, water and sanitation, prepared for the Commission on Sustainable Development at its twelfth session, covers this social and ecological interrelationship, underlining that diversity of human settlements is a central criterion for monitoring progress in the implementation of sustainable development. It looks at the impacts of urbanization on indigenous peoples' human settlements in both the rural and urban settings.

6. Sufficient attention must be paid at this meeting to reviewing the overall balance and practice of integrated land use planning and resource management to ensure that the long-term diversity and health of ecosystems and human settlements are maintained, including the well-being of indigenous peoples. The approaches, policies and actions adopted by the international community on these important matters, will have long-term bearing on the health and well-being of peoples and the planet.

II. Indigenous peoples and human settlements

Box 1

The overall human settlement objective is to improve the social, economic and environmental quality of human settlements and the living and working environments of all people, in particular the urban and rural poor.

Source: Agenda 21, chap. 7.

Diversity of human settlements — the Earth is our home

7. The Commission's review of implementation towards sustainable human settlements must start from an affirmation of the diversity of human settlements that have existed historically and in contemporary times: from small land-based communities to the large conurbations.

8. For 99 per cent of the history of human settlements, cities were one option, one way of life among a diversity of human settlements. However, in the most recent 1 per cent of human history, in the latter part of the twentieth century and the start of the twenty-first century, for the first time a majority of the human population will be living in urban areas. This transformation, which is closely linked to globalization, has magnified the reach of the consumption and production of cities to encompass the diverse lands, resources and human settlements around the world. One form of human settlement, the built environment, organized through States and the values of the market are encroaching and overwhelming other human settlements organized around local resources, institutions and values. Indigenous peoples' territories are being consumed by urban areas, destroying indigenous and local communities' own self-determination and sustainable development.

9. Most indigenous peoples today still live in human settlements outside modern cities and industrial centres. Indigenous communities embody historical relationships to lands, waters and forests and their livelihoods and economies are adapted to these diverse ecosystems such as forests, mountains, deserts, tundra or wetlands where they live. Human settlements are cultural homes within our larger ecological home, the Earth. In some countries with very high urban concentrations (e.g., New Zealand, Chile, the United States of America and Canada) of over 50-70 per cent, the number of indigenous persons living in cities reflects this trend.

10. Human settlements among indigenous peoples are characteristically self-sustaining communities that provide for peoples' social, economic, religious and political needs, and space where peoples are not separate from their land, waters and forests. This is a far cry from the urban concept of settlements as simply infrastructures and facilities. Women refugees in Mindanao, the Philippines, criticized the Government's resettlement project, saying that their concept of a home is not just the "four-cornered building ... A home has a place for growing vegetables and space for raising chickens and hogs to supplement the family's income. If we built only physical structures, we failed to address the woman's need to be productive within her own domain. The space must also be one where she has the

opportunity for livelihood, thus contributing to her empowerment as a productive member of society" (www.womenwagingpeace.net/content/articles/0074a.html).

11. Pastoralists are mobile indigenous peoples, who use mobility as a settlement and livelihood strategy, while conserving and protecting fragile environments. Some of their practices include enforcing traditional grazing policies where they restrict grazing in some parts of the land until it has rejuvenated, and fencing off watering points to prevent water pollution. Their settlement patterns are not fixed and permanent. They seasonally move from place to place with their livestock, including across national borders, but with the agreement of related pastoralist communities. Governments have pursued policies to settle and sedentarize pastoralists, but the land provided is often inadequate to maintain their livestock and livelihoods, and can be harmful to the environment.

12. For indigenous hunter-gatherers, nomads, swidden farmers, reindeer herders and pastoralists, a continuing relationship and access to their natural homelands provides livelihood and food security through patterns of human settlement which are appropriate to the natural environment. Their loss of land through government expropriation and priorities for modernization have severely impoverished them. Government policies pursuing sedentarization, forced resettlement or restricted access to customary lands are violating their rights to livelihoods and appropriate housing.

Displacement and urbanization

13. From the onset of colonization in many regions of indigenous peoples' lands and islands, human settlement and migration of colonizers and non-indigenous populations have and are continuing to be destructive to the original habitants. With colonization often comes policies of militarization, removal of indigenous peoples, introduction of foreign diseases and imposition of foreign governmental structures that don't recognize the inherent rights of the indigenous to their lands, waters and self-determination and to practise their culture and spiritual ceremonies. Today, this threat continues to be significant for indigenous peoples in voluntary isolation, for example in some forests in the Amazon basin. Indigenous peoples continue to suffer forcible and violent mass displacement through development projects that have the effect, if not the intent, of forcible assimilation.

14. Whereas urbanization and modernization has resulted in economic and material improvements for many, the overwhelming experience of indigenous peoples has been one of impoverishment in both rural and urban areas. The incorporation and encapsulation of indigenous peoples within modern States through colonization and modernization has rendered their land and resources open to expropriation for use by others. Characteristically, this has happened through the settlement of indigenous territories by colonists, through the operations of extractive industries, through the construction of large infrastructure projects, the proclamation of protected areas, and more recently as sites for industrial expansion and as dumping areas for wastes and toxics from industrial processes.

15. Many of these projects directly undermine the goal of poverty alleviation and providing housing for all, by resulting in the forced displacement of many indigenous communities, leading to their deep impoverishment in traditional homelands and contributing to urban drift. Caused by the loss of lands and

territories, and by negative effects of free trade agreements that have created mechanisms of privatization of indigenous communal lands, many indigenous peoples are forced to migrate, as an economic need, to urban areas. Within these pockets of urban cities, indigenous peoples join human settlements of poverty to survive without the support of family, community and culture.

16. In many regions, urban sprawl and population growth are infringing into the traditional homelands of indigenous peoples with no local or national mechanism to protect the rights of indigenous peoples. Human settlements of various class and caste systems compete with indigenous peoples over scarce land and water, creating political and legal struggle over land and water rights.

Involuntary displacement

17. Indigenous peoples' poverty is directly linked to dispossession from their lands, which are essential for their security, livelihoods and well-being. Material impoverishment is also associated with language and cultural loss.

Box 2
Cultural poverty: a Dayak perspective

These seven principles summarize the way in which the Dayak achieve their ideal of life, based on their cultural values.

1. Sustainability (biodiversity) versus productivity (monoculture)
2. Collectivity (cooperation) versus individuality (competition)
3. Naturality (organic) versus engineered (inorganic)
4. Spirituality (rituality) versus rationality (scientific)
5. Process (effectiveness) versus result (efficiency)
6. Subsistence (domesticity) versus commerciality (market)
7. Customary law (locality) versus State law (global)

Failure to achieve these ideals is believed to result in *barau* (Jalai Dayak): a situation when nature fails to function normally, and thus results in chaos. *Barau* is a result of Adat transgression, a broken relationship with nature. "Poverty" for the Dayak is linked directly with failure to exercise the Adat that governs the way in which the people should live.

Source: John Bamba, "Seven Fortunes vs. Seven Calamities".

18. In the cities, indigenous peoples suffer major disparities in all measurable areas such as lower wages, lack of employment, skills and education, poor health, housing and criminal convictions. Many indigenous city dwellers maintain reciprocal relationships with family and their homelands and build associations and relations as a form of finding their own space and sociocultural continuum outside

of their traditional homes — a coping mechanism that helps minimize conflicts brought about by the drastic change and demands of urbanization.

19. The livelihood and employment strategies pursued by indigenous urban dwellers build on traditional skills; but many end up in low-paying work. Some examples are marketing of handicrafts; trading of traditional herbs and remedies; as construction workers by Igorot men skilled in building rice terraces and Masai males serving as security guards reflecting their traditional role as warriors in East Africa. Others are also exploited as tourist attractions in tourism establishments. Many have livelihoods as petty traders, menial and domestic workers and low-paid service workers, as well as being a source of cheap labour in the city.

20. On the other hand, indigenous urban dwellers have raised the visibility of indigenous issues through advocacy and public actions in the cities.

Sustainable land-use planning and management — demarcation and respect for land rights of indigenous peoples

21. Within the action plan on human settlements, the implementation of integrated land use planning and natural resource base management strategies continues to be weak, with slow progress being made in the mapping and demarcation of indigenous peoples' lands and territories towards security of tenure and legal protection. Indigenous peoples give high priority to this activity, which is critical to the substance of indigenous peoples' self-determination and sustainable development.

22. For as long as indigenous peoples are denied security over the lands, waters and resources they have traditionally occupied and used, their contributions and benefits to sustainable development remain unfulfilled. Weak or absent legal protection for indigenous peoples' rights in the development process, including in the planning and implementation of water, sanitation and other infrastructure projects for human settlements, is the outstanding obstacle to be addressed.

Box 3
Mapping for land rights: indigenous land demarcation

In the past 25 years, the constitutions of a large number of countries, notably those in Latin America, have been revised to accept the presence of indigenous peoples as integral elements of their multicultural and pluri-ethnic societies. Constitutions and laws have been passed which provide for the recognition of indigenous peoples' rights in land. However, progress towards actual recognition of these rights in practice has been slow, mainly because conflicting laws, policies and economic interests have been given priority in land use planning and the allocation of rights.

One of the most significant developments that has taken place during this period has been the proactive initiatives undertaken by Indigenous peoples and supportive non-governmental organizations to map and demarcate their own lands. Using a wide variety of technologies and methods, indigenous communities from the Arctic to the Amazon and from the Americas to Papua New Guinea have been making their

own maps of their lands as a way of confronting the imposed land use plans of Government and establishing the complexity and validity of their own visions of land. Techniques used have varied widely, from simple sketch mapping and community level discussion groups, to highly technical surveys involving qualified cartographers and registered surveyors.

Some of the most progressive techniques involve training community members in the use of global positioning system devices so that they are able to precisely "waymark" locations of cultural, economic and historical significance. Importing such geo-referenced data into simple global information system grids along with scanned in base maps allows indigenous communities to own and control the content of maps without compromising on technical quality. Community experiences with these techniques have proved their value not just for validating indigenous knowledge and securing indigenous rights but also as mechanisms for overcoming inter-ethnic rivalry, promoting intergenerational transmission of customary law (and lore) and promoting land-use planning.

Choice of the techniques has varied depending mainly on national laws and political contexts as well as the degree of autonomy sought by the mappers. In some countries, such as Peru and the Philippines, independent surveys, verified by government surveyors, are accepted as a basis for land claims and the registration of land titles. In other places, like Guyana and Sarawak, Governments have refused to survey indigenous lands, leaving the communities no choice but to carry out independent surveys themselves. Such maps have proved crucial in the subsequent assertion of land claims through the courts or, where government agencies have proved open to discussion, have provided a sound basis for the renegotiation of indigenous land claims, as in South Africa.

Although some Governments have proved hostile to these initiatives, even going so far in the case of Sarawak to make such mapping illegal, in general there has been a widespread appreciation that "social mapping" techniques provide an important means by which indigenous people can enter into dialogue with decision makers and land use planners on a more equal basis.

Source: Forest Peoples Programme (www.forestpeoples.org).

III. Indigenous peoples and water

Box 4
Indigenous Peoples Kyoto Water Declaration, March 2003

We, the indigenous peoples from all parts of the world assembled here, reaffirm our relationship to Mother Earth and responsibility to future generations to raise our voices in solidarity to speak for the protection of water. We were placed in a sacred manner on this earth, each in our own sacred and traditional lands and territories to care for all of creation and to care for water.

We recognize, honour and respect water as sacred and sustains all life. Our traditional knowledge, laws and ways of life teach us to be responsible in caring for this sacred gift that connects all life.

Our relationship with our lands, territories and water is the fundamental physical cultural and spiritual basis for our existence. This relationship to our Mother Earth requires us to conserve our freshwaters and oceans for the survival of present and future generations. We assert our role as caretakers with rights and responsibilities to defend and ensure the protection, availability and purity of water. We stand united to follow and implement our knowledge and traditional laws and exercise our right of self-determination to preserve water, and to preserve life.

23. Related to human settlement, water is a critical source of life. In many indigenous societies, their relationship to the life-giving qualities of water permeates their culture and spiritual values. Indigenous peoples' systems of water management and use are based on principles and practices that balance immediate needs with the needs of the environment and other living things, plants and animals, as well as other people, and the sustainability of future generations. Indigenous peoples have an important role in sustainable water resource management and their cultures and knowledge are an integral part of humanity's heritage and cultural diversity. In this context, due respect must be given to indigenous peoples' rights.

Water in crisis

24. Indigenous peoples from every region of the world are concerned that the ecosystems, including water systems, of the world have been compounding in change and are in crisis. Waters continue to be polluted with chemicals, pesticides, sewage, disease, radioactive contamination and ocean dumping, from mining to shipping wastes. Underlying the water crisis is a governance crisis and a cultural crisis. Indigenous traditional knowledge developed over the millennia is undermined by an overreliance on relatively recent and narrowly defined Western scientific methods, standards and technologies. Indigenous peoples support the implementation of strong measures to allow the full contribution by indigenous peoples to share their experiences, knowledge and concerns.

25. An ethical framework based on respect for life-giving water and its cultural manifestations is of critical importance for water policy and use. When water is disrespected, misused and poorly managed, indigenous peoples see the life-threatening impacts on all of creation, all populations and human settlements. Indigenous peoples' rights to self-determination and sovereignty, the application of traditional knowledge and cultural practices to protect the water are being disregarded, violated and disrespected. Already there are eruptions of serious disputes within and among States and indigenous peoples and local communities over water.

26. Throughout indigenous territories worldwide, indigenous peoples are experiencing increasing scarcity of freshwaters and the lack of access by indigenous communities and other life forms such as the land, forests, animals, birds, plants, marine life and air have to waters, including oceans. In these times of scarcity, Governments are creating commercial interests in water that lead to inequities in distribution and prevent access to the life-giving nature of water.

Mining and water

27. Global industrial expansion, in particular of the mining industry, has accelerated the contamination of groundwater and the environment with heavy metals, persistent organic pollutants and acids. In the north-eastern United States, in the state of Oklahoma, six indigenous tribes, the Quapaw, Eastern Shawnee, Seneca-Cayuga, Wyandotte, Ottawa and Peoria, have seen their once flourishing Tar Creek Watershed devastated by the acid mine drainage that flows murky orange from the Pitcher Mining Field.

28. The mineral extraction industry has left many indigenous communities with contamination and depletion of important water resources, along with ecological landscapes destroyed, family systems disrupted and the loss of food systems and the loss of sacred and culturally important land. An example of this is a mining company that is the largest coal producer in the world operating a coal mine on Navajo (Dineh) indigenous land in the United States that uses a slurry line that withdraws over 4,000 acre-feet, or 1.3 billion gallons, of water per year from the aquifer to fuel its slurry operation. The pipeline consumes an average of 120,000 gallons of water per hour and 43,000 tons of coal per day. As a result, the aquifer wells have decreased by more than 100 feet in some aquifer wells and discharge has dropped by more than 50 per cent in the majority of monitored local aquifer springs. This is especially devastating considering that the area recently experienced a seven-year drought.

29. The Ogallala aquifer in the United States, which underlies parts of eight states, South Dakota, Nebraska, Wyoming, Colorado, Kansas, Oklahoma, New Mexico and Texas, is being overpumped throughout the entire area. One third of its volume is being siphoned off for irrigated agriculture. Water is being extracted from the Ogallala between 8 and 40 times faster than the natural rate of recharge. Over 40 indigenous tribes in this area are affected. In this vast dry region, wildlife is dependent on the Ogallala's groundwater, since it helps recharge surface water. Studies have found that 21 of 50 species of fish have disappeared, largely because of depletion of the Ogallala led to the desiccation of rivers and streams dependent on the aquifer for replenishing base flow.

Energy and water

30. Global warming and climate change pose significant threats to indigenous and local communities from the Arctic, Latin America, Africa, Asia and South-East Asia, the Pacific islands, North America and every region of the world. Climate change, if not halted, will result in increased frequency and severity of storms, floods, droughts and water shortage. Globally, climate change is worsening desertification. It is polluting and drying up the subterranean and water sources, and is causing the extinction of precious flora and fauna.

31. The communities most vulnerable to climate change are indigenous peoples and impoverished local communities, occupying marginal rural and urban environments. Small island communities are threatened with becoming submerged by rising oceans. Many countries in Africa have been suffering from unprecedented droughts.

32. For the Inuit, Inupiat, Yupik, Athabascan and other indigenous tribes of Alaska and northern Canada, climate change poses an immediate danger to the continuation of their way of life. The Inuit and other indigenous tribes of the polar regions are watching their world melt before their eyes. Glaciers are receding, the ice is thinning, coastlines are eroding, and permafrost is melting, which has destroyed the foundations of houses, eroded the seashore, disrupted traditional subsistence activities and forced communities to move inland. Climate change is happening now and these communities and nations are already bearing the brunt. Without snow and ice their way of life and culture will disappear.

33. Recent years have seen severe drought conditions in the regions of the United States, Mexico and Central America. Conflicts surrounding access to existing sources of limited water supplies have been amplified owing to drought conditions. This has resulted in indigenous peoples being forced to defend their access to and customary uses of water, or else abandoning their homelands and subsistence agricultural economies for work in cities. In times of scarcity, we see Governments and private corporations creating commercial interests in water that lead to inequities in water distribution, with resulting devastating impacts on traditional farming and other local food systems.

Dams and indigenous peoples

34. Indigenous peoples and local communities have suffered disproportionately from the impacts of large dams. In India, 40 per cent of all those who have been displaced by dams are the Adivasis who represent less than 6 per cent of the Indian population. Almost all the large dams built and proposed in the Philippines are on ancestral lands of the country's 5 million indigenous peoples. In Canada, the Lake Winnipeg Churchill-Nelson River Hydroelectric Project in northern Manitoba and the James Bay Quebec Hydroelectric Project in Quebec are the two largest and most complicated dam projects ever undertaken in Canada. These projects have adversely affected vast areas of environmentally fragile boreal forest environments, animal habitat and Cree peoples' land, as a result of river diversion, flooding, seasonal inversion of flows, shoreline erosion and destruction of access and devastation to the indigenous trap-line culture.

Box 5
Dams and indigenous peoples

The recent push for water and energy projects through the building of more large dams continues to threaten the security of many indigenous communities, even while many others are demanding reparations for past wrongs.

Indigenous participants at the workshop confirmed that large dams have disproportionately impacted indigenous peoples and future dam building also targets their lands disproportionately. New dams affecting indigenous peoples are being built in Botswana, north-east India, Honduras, Mexico, the Philippines, the Mekong basin, Malaysia and many others. Major impacts include: loss of land and livelihood; the undermining of the fabric of their societies; cultural loss; fragmentation of political institutions; breakdown of identity and human rights abuse. In many countries, militarization has accompanied dam-building.

Dam planning and projects are characterized by serious procedural failures, including:

- Failure to identify the distinctive characteristics of indigenous peoples in project planning;
- Failure to recognize customary rights and territories;
- Inadequate or absent environmental and social impact assessments;
- Inadequate compensation, ill-planned resettlement and tardy and inadequate reparations;
- Weak participatory mechanisms, no negotiation and prior and informed consent;
- Social exclusion and prevalent discrimination in national societies, including lack of citizenship rights.

The widespread adoption of neo-liberal economic policies is further weakening national protection of indigenous peoples' rights and creating legislative conflicts. Regional economic plans like Plan Puebla Panama and regional trade agreements promote regional energy grids and further dam-building. Under these conditions, there is weakening accountability of dam builders, operators, contractors, consultants and funders to the affected peoples. This tendency is likely to be exacerbated by moves to increasingly privatize the dam-building industry. These policies are fuelling conflicts in many countries, and indigenous peoples have mobilized in popular uprisings against State policies, including land and water privatization.

Source: Second International Meeting of Dam-Affected Peoples, Thailand, November 2003.

Water privatization

35. Water systems within the homelands of indigenous peoples are increasingly being governed by externally imposed management systems, as well as trade agreements and commercial practices that disconnect them as peoples from the ecosystem. Water is being treated as a commodity and as a property interest that can be bought, sold and traded in global and domestic market-based systems.

36. Commercialization and privatization of water contradicts indigenous perspectives that water is inseparable to land and people where it is found. Transporting, bottling and diverting water from its natural flow, appropriates inherent rights to access and benefits of water to private corporations at the expense of local and indigenous communities who are the primary users in its conservation and management.

37. Within the Andean region of Latin America, indigenous and local community water management systems constitute the basis of sustaining local livelihoods and assisting in the national food security. Indigenous and local communities are the main providers of food for the national populations. However, extremely unequal distribution and access to water and the rights of indigenous peoples to customary water rights in Latin American countries are under increasing pressure. Millions of indigenous water users are structurally among the poorest groups of society within the Andean region. They are not represented in national and international decision-making bodies, contributing to a situation of increasing inequality, poverty, conflict and ecological destruction.

38. Privatization of basic public services, such as water and energy, in several countries has spurred massive general strikes and protests such as those led by indigenous peoples in Bolivia, South America. The General Agreement on Trade in Services, whose coverage is being expanded to include environmental services of sanitation, nature and landscape protection, financial services, tourism, among others, provides the mechanism for the privatization of basic public services.

39. Increasing demographic pressure, migration and urban growth of rural areas are leading to profound changes in the agrarian structure, local cultures and forms of natural resource management. Newcomers enter the territories of local indigenous communities claiming a substantive share of existing water rights. Powerful stakeholders manage to influence new regulations and policies or monopolize water rights. Indigenous peoples within the Andean regions are witnessing a denial of contemporary forms of indigenous water management systems in addition to the denial by the Governments and non-indigenous peoples of inherent indigenous rights to land and water.

IV. Indigenous peoples and sanitation

40. Safe and adequate water supply, wastewater, sanitation and waste disposal systems are essential to the health of indigenous peoples.

41. Among many indigenous peoples worldwide, in both developing and developed countries, safe and adequate water supply and wastewater disposal facilities are lacking. An alarming number of indigenous peoples have unsafe drinking water, and the numbers are growing. There is a lack of community

infrastructure programmes to address the most immediate health threats, requiring the provision of clean water, basic sanitation facilities and safe housing. One out of eight indigenous communities in Canada are threatened by unsafe water, which each year kills indigenous newborn and elderly.

42. Safe and adequate water supply and wastewater disposal facilities are lacking in approximately 7.5 per cent of indigenous tribal homes in the United States, compared with 1 per cent of the homes for the United States general population. While 1 per cent of the general United States population lacks safe water and sewage systems, 7.5 per cent of Indian homes lack these systems. In some parts of indigenous lands in the United States, 36 per cent of Indian homes lack these systems. The basic sanitation needs in nearly half of Alaska's 192 Native villages have yet to be met. Some 89 of the 192 Alaska Native villages do not have water piped or trucked to their homes; rather, villagers must physically carry water from community watering points and spigots. As many as 20,000 of the 86,000 individual Alaska Native villagers depend on systems as inadequate as the so-called "honey bucket" or pail.

V. International water policy

43. Indigenous peoples have challenged the dominant paradigm, policies and programmes on water development, which includes, among others; government ownership of water, construction of large water infrastructures; the privatization and commodification of water; the use of water and the liberalization of trade in water services, which do not recognize the rights of indigenous peoples to water. They have also participated in a growing number of international activities on water which have significant relevance for indigenous peoples, and highlight the importance of water-related knowledge and values, and of recognizing indigenous peoples rights in decision-making on water and energy development.

44. Indigenous peoples of the world assembled at Kimberley, South Africa, for the Indigenous Peoples' International Summit on Sustainable Development from 19 to 23 August 2002, as a pre-summit to the World Summit on Sustainable Development. Some 300 indigenous representatives developed an Indigenous Peoples' Plan of Implementation on Sustainable Development and the Kimberley Declaration, which included water issues.

45. The Water and Cultural Diversity Thematic Statement of the Third World Water Forum brought attention to the significance of the cultural dimension of water that developed through the millennia by human societies and that constitutes a treasure of sustainable practices and innovative approaches.

46. The Thematic Statement recognized the importance for indigenous knowledge-holders to be full partners with scientists to find solutions to water-related problems.

47. The World Commission on Dams was another process in which dams-affected indigenous peoples brought their situation to the attention of the international community.

Box 6
World Commission on Dams: strategic priorities for decision-making

The World Commission on Dams, in its report entitled "Dams and Development: A New Framework for Decision-Making", highlighted the disproportionate impact of large dams on the lives and environments of indigenous peoples around the world. The report underlined respect for indigenous peoples in water and energy development.

Based on five core values of equity, efficiency, participatory decision-making, sustainability and accountability, the Commission developed a constructive and innovative way forward for decision-making in the form of seven strategic priorities and corresponding policy principles. These move from a traditional top-down, technology-focused approach to advocate significant innovations in assessing options, managing existing dams, gaining public acceptance and negotiating and sharing benefits.

Gaining public acceptance

Public acceptance of key decisions is essential for equitable and sustainable water and energy resources development. Acceptance emerges from recognizing rights, addressing risks, and safeguarding the entitlements of all groups of affected people, particularly indigenous and tribal peoples, women and other vulnerable groups. Decision-making processes and mechanisms that are used enable informed participation by all groups of people, and result in the demonstrable acceptance of key decisions. Where projects affect indigenous and tribal peoples, such processes are guided by their free, prior and informed consent.

By bringing to the table all those whose rights are involved and who bear the risks associated with different options for water and energy resources development, the conditions for a positive resolution of competing interests and conflicts are created. Negotiating outcomes will greatly improve the development effectiveness of water and energy projects by eliminating unfavourable projects at an early stage, and by offering as a choice only those options that key stakeholders agree represent the best ones to meet the needs in question. This will result in fundamental changes in the way decisions are made.

48. For indigenous peoples, the Commission's strategic priorities underline the need for decision-making processes on water and energy development based on negotiated agreements among all affected and interested parties, and which respect the fundamental rights of indigenous peoples, including free, prior and informed consent.

49. A fair, informed and transparent decision-making process, based on the acknowledgement and protection of existing rights and entitlements, will give all stakeholders the opportunity to fully and actively participate in the decision-making process. Failure to recognize the rights of all affected groups, whether legally

sanctioned or not, coupled with the significant involuntary risk imposed on the most vulnerable, is central to the dams debate and associated conflicts. The Commission was convinced that this represents the way forward to address the underlying conflicts in water rights and development.

50. The UNESCO Universal Declaration on Cultural Diversity (2001) and the Johannesburg Declaration on Sustainable Development (2002) urged dialogue and cooperation within human society and among cultures in order to wisely use and sustainably manage earth's resources, including freshwaters and oceans.

VI. Conclusions and recommendations

Indigenous self-determination and rights to water

51. Indigenous peoples have the right to self-determination. By virtue of that right indigenous peoples have the right to freely exercise full authority and control of their natural resources, including water. Such rights cover both water quantity and quality and extend to water as part of a healthy environment and to its cultural and spiritual values. Indigenous interests and rights must be respected by international agreements on trade and investment, and all plans for new water uses and allocations.

52. Indigenous peoples' interests with regard to water and customary uses must be recognized by Governments, ensuring that indigenous rights are enshrined in national legislation and policy.

53. Self-determination includes the practice of our cultural and spiritual relationships with water, and the exercise of authority to govern, use, manage, regulate, recover, conserve, enhance and renew their water sources, without interference.

54. The promotion of respect and observance of indigenous peoples' rights and fundamental freedoms, in particular the right of self-determination and the free use and control of their lands and territories, is necessary for the use and conservation of water and of water sources and resources.

55. International law recognizes the rights of indigenous peoples to the following:

(a) Self-determination;

(b) Ownership, control and management of their traditional territories, lands and natural resources;

(c) Exercise their customary law;

(d) Represent themselves through their own institutions;

(e) Require free prior and informed consent to developments on their land;

(f) Control and share in the benefits of the use of their traditional knowledge.

56. Governments should support the immediate adoption of the Draft Declaration on the Rights of Indigenous Peoples, which will help ensure the recognition and protection of indigenous peoples' rights.

Human rights to water

57. Governments must recognize and adopt policies of water as a human right that entitles everyone to safe, sufficient, affordable and physically accessible water for personal and domestic use.

58. States must comply with their human rights obligations and commitments to legally binding international instruments to which they are signatories, including but not limited to the Covenant on Civil and Political Rights, the Covenant on Economic, Cultural and Social Rights, the International Convention on the Elimination of All Forms of Racial Discrimination, as well as their obligations to conventions on the environment, such as the Convention on Biological Diversity, the United Nations Framework Convention on Climate Change and the United Nations Convention to Combat Desertification in Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa.

59. Human rights obligations of States must be complied with and respected by international trade organizations. These legally binding human rights and environmental obligations do not stop at the door of the World Trade Organization (WTO), the General Agreement on Trade in Services and other regional and bilateral trade agreements.

60. For indigenous peoples, the fundamental criteria they apply in assessing the progress made in these international agreements and in their implementation is important and dependent on whether or not their basic human rights are respected.

Participation, consultation and prior informed consent

61. Governments must ensure public participation in all aspects of water management and decision-making, particularly the participation of indigenous peoples when there are indigenous communities within water management areas. The participation of indigenous peoples will include men, women, youth and elders.

62. To recover and retain indigenous peoples' connection to their waters, they must have the right to make decisions about waters at all levels. Governments, corporations and intergovernmental organizations must, under international human rights standards, require indigenous peoples' free prior and informed consent and consultation by cultural appropriate means in all decision-making activities and all matters that may have effect, including partnerships. These consultations must be carried out with deep mutual respect, meaning there must be no fraud, manipulation, duress or guarantee that agreement will be reached on the specific project or measure.

Box 7

Article 7 (1) of ILO Convention 169 provides that:

"The people concerned shall have the right to decide their own priorities for the process of development as it affects their lives, beliefs, institutions and spiritual well-being and the lands they occupy or otherwise use, and to exercise control, to the extent possible, over their own economic, social and cultural development."

Building on these principles, article 30 of the Draft Declaration on the Rights of Indigenous Peoples acknowledges that:

"Indigenous Peoples have the right to determine and develop priorities and strategies for the development or use of their lands, territories and other resources, including the right to require the State to obtain their free and informed consent prior to the approval of any project affecting their lands, territories and other resources, particularly in connection with the development, utilization or exploitation of mineral, water or other resources. ..."

63. Base integrated water resources management strategies must include indigenous peoples and local community participation and provide adequate mechanisms for dialogue and conflict resolution within river basins and across national boundaries. Indigenous peoples are ready to work with Governments to set up these mechanisms and share indigenous knowledge.

64. Participatory decision-making in integrated water resources management should take into account all facets of cultural diversity, gender and age and seek informed consensus.

Box 8

Principles of consultations with indigenous peoples include:

- Consultations are conducted under the communities' own systems and mechanisms;
- Indigenous peoples have the means to participate fully in such consultations;
- Indigenous peoples are involved in both the local and traditional decision-making processes, including the direct participation of their spiritual and ceremonial authorities, individual members and community authorities as well as traditional practitioners of subsistence and cultural ways in the consultation process and the expression of consent for the particular project or measure;
- There is respect for the right to say no;
- Ethical guidelines exist for a transparent and specific outcome.

65. Governments and international agencies should recognize and support indigenous peoples' commitment to establish an indigenous working group to facilitate linkages between indigenous peoples and international organs to provide technical and legal assistance to indigenous peoples on water and water related issues.

66. Governments should recognize that within many indigenous cultures, women are the caretakers and users of traditional water resource systems, requiring the need for mainstreaming gender and indigenous peoples in integrated water resources management strategies and implementation.

67. Both indigenous peoples and gender analysis and indigenous peoples and gender sensitive indicators must be integrated in the implementation of the targets of the World Summit on Sustainable Development and the Millennium Development Goals. Measurements for the assessment of targets and goals are needed to sustain the positive impacts of gender mainstreaming for both indigenous women and men. Qualitative indicators are required to monitor the process and the impacts.

Human settlements

68. The transformation of human settlements in this century towards largely urban settlements must not undermine the importance of rural settlements, which are equally deserving of attention. An explicit goal for a programme of work on human settlements must be the promotion of balanced and equitable relationships between diverse urban and rural communities, and sustainable human settlements in relation to the Earth.

69. The development of action plans on human settlements and in the implementation of integrated land use planning and integrated resource base management strategies must be strengthened to provide security of tenure and legal protection of indigenous peoples' lands and territories. Legal protection for indigenous peoples' rights in the development process, including in the planning and implementation of accessible water, sanitation and other infrastructure projects for human settlements, is the outstanding obstacle that must be addressed.

70. Safeguards must be put in place to protect the less powerful and vulnerable communities whose well-being is closely linked to biodiversity and integrity with the natural world to address the over-exploitation of lands, unsustainable agricultural practices, waters, forests and other resources of indigenous peoples and rural communities, and from the harmful dumping and accumulation of wastes.

Water and sanitation

71. Regional and global goals must be developed for realistic local, national targets for improved sanitation and hygiene services, adopting community-based approaches and bearing in mind the human right to clean and safe water.

72. Developing and developed countries with indigenous tribal populations must develop and strengthen clear policies, targets and institutional frameworks to improve sanitation, assure safe and adequate water supply and access and hygiene services to indigenous peoples.

73. Water and sanitation must remain in the public sector and all Governments must commit to public sector delivery of water services. This includes ensuring that adequate financial resources are made available, and that adequate local capacity is built. In areas of indigenous communities, mechanisms for the option for indigenous peoples to control and manage their own water and sanitation systems must be provided.

Dams and water diversion

74. Governments, international financial institutions, bilateral donors and the private sector should cease promoting water mega-projects without reference to international agreements and must always incorporate the recommendations of the World Commission on Dams into water and energy planning processes, including reparations. These include the Commission's core values, strategic priorities, the "rights and risks framework" and the use of multi-criteria assessment tools for strategic options assessment and project selection. Its rights-based development framework, including the recognition of the rights of indigenous peoples in water development is a major contribution to decision-making frameworks for sustainable development.

Climate and water

75. Climate variability and weather extremes will derail achieving the 2015 Millennium Development Goals without considering climate change. It is imperative for States to fulfil the mandates of the United Nations Framework Convention on Climate Change and to ratify the Kyoto Protocol. Governments must end financial subsidies to fossil fuel production and processing and for aggressive reduction of greenhouse gas emissions, calling attention to the Intergovernmental Panel on Climate Change, which reported that an immediate 60 per cent reduction of carbon dioxide is needed to stabilize global warming.

76. Enhanced policies and measures are needed towards adaptation to the impacts of climate variability and change, along with more aggressive efforts on further reduction of greenhouse gas emissions.

77. Indigenous peoples- and community-level decision-making is important in all categories of action and measures coping with climate change, and how climate variability and change can be mainstreamed into local, national, regional and international water management policies and practices.

Ecological approach to water management and indigenous traditional ecological knowledge

78. Implementation should be carried out using an ecological approach that incorporates indigenous traditional ecological knowledge principles to water management. Both the ecological approach and traditional ecological knowledge integrates different perspectives into integrated management of land, forests, oceans, air, human settlements and water resources.

79. Understanding integrated water resources management inherently recognizes the ecosystems' approach to river and water basin management, including the function of ecosystems as the basis for livelihood of people and conservation of biological diversity.

80. Governments should widely implement the following measures of an ecological approach:

(a) Integrate indigenous traditional ecological knowledge principles of the sacred nature of water and the need to protect all water sources as sacred sites;

(b) Protect and restore ecosystems, springs, wetlands, freshwaters, lakes, water basins and aquifers vital for water resources;

(c) Leave enough water in rivers to maintain downstream benefits and in-stream flows;

(d) Develop action plans to implement the integrated river basin management initiative;

(e) Protect all oceans, coral reefs and coastal systems by the protection of sustainable management of fisheries and aquaculture;

(f) Protect mountains, forests, headwaters and rivers;

(g) Integrate wetland conservation and restoration in water resources and land use planning;

(h) Establish proper management regimes for critical aquatic biodiversity;

(i) Protect freshwater ecosystems and biodiversity with sustainable management of freshwater fisheries;

(j) Integrate the management of land, air and water resources, with special attention to environmental protection and resource conservation;

(k) Implement air shed and watershed pollution control, treatment and prevention programmes with financing and legal frameworks for implementation;

(l) The concept of environmental flow requirements needs to be further worked out and applied at the basin level to provide a basis for striking a balance between water for food and environmental security;

(m) Protect species, habitats and biodiversity;

(n) Within arctic regions, protect glaciers, snow and ice conditions that comprise the biological integrity of the arctic environment;

(o) Protect glaciers and snow coverings within mountain regions that comprise the biological integrity of the river systems and water basins.

Box 9
Traditional ecological knowledge

Indigenous peoples' traditional knowledge and practices are dynamically regulated systems. They are based on natural and spiritual laws, ensuring sustainable use through resource conservation. Traditional ecological knowledge is the accumulated knowledge and understanding of ones' place in relationship to the universe. This relationship extends to knowledge and practices that indigenous communities hold about the spiritual-cosmovision, bio-physical, socio-economic and cultural-historical aspects of their local environment. Traditional ecological knowledge builds upon the experience of earlier generations and allows for adaptation to appropriate technological and socio-economic changes of the present. Indigenous peoples' system of the millennia of water management and use is based on principles and practices that balance immediate needs with the needs of ecology, the environment and other living things, plants, fish and animals, as well as other people, and the sustainability of future generations. Traditional ecological knowledge encompasses spiritual relationships, relationships with the natural environment and the use of natural resources, relationships between humans, relationships with animals, birds, fish, forests, plants, water, oceans, and all elements, and is reflected in language, social organization, values, institutions and laws.

Source: Indigenous Environmental Network.

Privatization and commodification of water

81. Water and water services must be kept out of General Agreement on Trade in Services, WTO and other multilateral and regional trade agreements.

82. The World Bank, the International Monetary Fund, regional banks like the Asian Development Bank, the African Development Bank and the Inter-American Development Bank, should stop the imposition of water privatization or "full cost recovery" as a condition for new loans and renewal of loans of developing countries.

Government and corporate accountability

83. Political, technical and legal mechanisms on the domestic and international level should be developed so that the States, as well as transnational corporations and international financial institutions are held accountable for their actions or inactions that threaten the integrity of water, land, air, biodiversity and indigenous peoples and local communities.

Governance

84. Developing countries need to take primary responsibility for establishing good water governance and water management plans, and to ensure that water is integrated into national poverty reduction strategies. Good governance is essential to provide sustainable solutions to the water needs of indigenous peoples and poor people in developing countries.

85. Developed countries, with indigenous peoples, need to take primary responsibility for establishing good water governance and water management plans to indigenous communities and poor communities. Good governance is essential to provide sustainable solutions to the water needs of indigenous peoples and poor people in developed countries.

86. Governments must enhance the participation, cooperation and mutual partnership of indigenous peoples, in all aspects of agricultural water use, development and management; recognize indigenous knowledge on water management; increase access to water resources; and recognize indigenous peoples' interests on water use, allocation and customary uses.

Financing and investments

87. Indigenous interests and rights must be respected by international agreements on trade and investment, and all plans for new water uses and allocations.

88. Governments must recognize the importance of providing support to small-scale local investments, by local authorities, indigenous communities and with the support of non-governmental organizations. Regulations of multilateral financing agencies do not allow lending to local governments and indigenous communities therefore requiring mechanisms for direct support to local levels and indigenous communities.

89. International law should ensure that water is not used as a vehicle for oppression and should promote local, national and regional cooperation.

90. International and domestic systems of restoration, financing, investments and compensation should be established in partnership with indigenous peoples to restore the integrity of water and ecosystems.

Capacity-building and technology transfer

91. Capacity and technological transfer initiatives should recognize indigenous peoples' traditional practices, including traditional water management as dynamically regulated systems. They are based on natural and spiritual laws, ensuring sustainable use through traditional resource conservation. Capacity includes developing education programmes on indigenous traditional ecological knowledge of water and indigenous systems of water management.

92. Governments must recognize the need for utilizing technologies such as rainwater harvesting, drip irrigation, crop rotation and other indigenous knowledge and sustainable water conservation practices within current farming methods.

93. Environmentally sound technologies must be identified and adopted; economic incentives must be given for the use of pollution prevention and control systems. As a mechanism to protect the health of watersheds and groundwater systems, the establishment of wastewater disposal and treatment facilities must be given top priority for the minimization of waste generation and the constant recycling and reuse of wastewater.

94. Practical, efficient and low-cost technologies are important tools for providing clean drinking water and basic sanitation.

95. Capacity development is a main focus of water policies that needs to be amplified with more action and targets with particular emphasis on building capacities in indigenous communities and local communities and government agencies.

96. Cultural diversity and intercultural dialogue should be the guiding principles for the development of awareness raising, educational and capacity-building materials and methods.

97. Incorporate in scientific and professional conferences, sessions on the relevant indigenous and customary knowledge and practices.

98. Indigenous traditional knowledge developed over the millennia should not be compromised by an overreliance on relatively recent and narrowly defined Western reductionist scientific methods and standards. Indigenous peoples support the implementation of strong measures to allow the full and equal participation of indigenous peoples to share their experiences, knowledge and concerns.

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Discussion papers submitted by major groups

Note by the Secretariat**

Addendum

Discussion paper by farmers' organizations***

How to access and manage water in agriculture: the experience of farmers and their organizations

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I. New developments and challenges

1. Over 1 billion people, one sixth of the world's population, still lack access to a safe domestic water supply: 2.4 billion people, half of the world's population, are without adequate sanitation. The demand for freshwater is increasing both from industry and the expanding urban areas; both are placing additional pressures on freshwater resources. As agriculture too continues to grow, so does its freshwater needs. The Food and Agriculture Organization of the United Nations (FAO) predicts that it will be necessary to double world food production over the next 25 years using essentially the same land area. Moreover, by 2025, more than three billion people will face water scarcity.

2. This alarming global picture shows the pressure on global water resources. Currently, about 70 per cent of the world's freshwater supplies are used for agriculture, 85 per cent by developed countries and the remaining 15 per cent by the developing world, where most of the population is rural and subsists on family agriculture. It is clear that, in order to achieve a sustainable agricultural sector, it will be called upon to increase the efficiency of its water use, that is, "more crop per drop". Consequently, sustainable agriculture must be made even more intensive and productive than it is now, despite the substantial productivity gains achieved over the last 30 years, which mostly apply to developed countries.

3. Increasing the land area under irrigation is one key element in making the land more productive. However, water constraints may well make expanding irrigation to feed an additional 1.5 billion people by 2025 very problematic. Therefore, future productivity gains must be achieved through sustainable intensification and more efficient use of limited resources such as water. Research on farming methods that minimize the need of water is needed. At the same time, farmers need to be more skilled and aware of this alarming picture. Taking into account the specific needs of the farmers and rural communities, it is important that national and international policies to solve the problem of access to water and the management of this scarce resource in the most efficient way be drawn up. In this regard, the role of farmers' organizations and their political positions are indeed crucial.

4. Issues concerning common access to and management of freshwater supplies have a central role in sustainable development and eradicating poverty. They have now been given priority in international policy as a result of the World Summit on Sustainable Development. The focus on water was intensified in particular in 2003, which was declared the International Year of Freshwater. In reaction to the pressures of development and population growth, many countries have begun to investigate approaches that can sustain their water use in the future. However, all countries do not face the same problems with respect to water resources. Some countries have excess water, while others face water scarcity problems. Appropriate water and food strategies must, therefore, be country, region, and location specific.

5. More particularly, countries must take into account the specific needs of the different user communities and find appropriate means to balance them off, without putting any of the communities, or their needs, at the fringe of decision-making processes. The knowledge on how to access and manage water resources in the most appropriate way is not only a technical matter but must rather be perceived in a holistic context, as the socio-economic and political dimensions are crucial elements of this paradigm.

6. Dealing with the issue of managing water in the most efficient way should go beyond the technical and economic aspects; the social component needs to be explored in a more in-depth manner if we want a voluntary change in behaviour.

7. This innovative way at looking at water issues puts the users in a position where they need to question themselves and face problems that seem to evade them. We need to put in place not only new technically and economically sustainable water management systems, but also systems that are socially and environmentally acceptable. Traditional water supply-driven management does not integrate the complexity of the social dimension which includes issues involving communication, raising awareness and the participation of different users.

8. In this new scheme, the involvement of farmers and their organizations, as well as other user communities, are considered key to the development of appropriate management frameworks. They must become more responsible and proactive in managing this scarce resource.

9. Experience shows how important it is for farmers to be proactive and involved in trying to change ways of managing water resources. Farmers throughout the world have interesting stories to tell of practical actions and voluntary initiatives, which demonstrate their willingness to safeguard natural resources while continuing to achieve food security with the means that they have available.

II. Access to water

10. Access to water is critical to agriculture. Rural communities in developing countries are the first to suffer from the lack of access to water resources. Rural areas are often remote and rural dwellers are often in a weak position to promote their interests. Instead of waiting for public authorities to solve their problems, farmers need to organize and be proactive in bringing about their own solutions. Through group structures, farmers can ensure that the needs and interests of the poor receive greater priority.

Specific experiences

1. Improving access to water in rural areas: the initiative of Liton Free Farmers Cooperative from the Philippines

11. Located in the southern Philippines, the Liton Free Farmers Cooperative was created by residents of a rice-farming village who saw the need to work together to address their economic problems. The cooperative's officials took the initiative to approach the Federation of Free Farmers/Federation of Free Farmers Cooperative, Incorporated (FFF/FFFCI) National Office for possible assistance in setting up a potable water system for their settlement.

12. The community faced several problems, including polluted rainwater and/or unhealthy shallow wells for their drinking, washing, bathing and other requirements; polluted nearby water tables owing to the intensive use of chemical fertilizer; and lack of a drainage system which had created stagnant water ponds.

13. The proposal was to set up a 10,000 gallon capacity water pump and tank and a web of water distribution pipes to provide clear and potable water to the 223 farmer-households.

14. The FFF/FFFCI National Office helped in locating a donor who provided a grant for the construction of the water tank and part of the distribution system. It also assisted the cooperative in securing a water permit from the National Water Resources Board.

15. In turn, the Liton Cooperative agreed to shoulder the costs of completing the distribution system, while their members agreed to shoulder expenses for in-house pipes, fittings, and related items. Each household was also required to install a water meter, which would be used for billing them for the maintenance of the water system.

Impacts

16. The village-based water system was the first of its type and scale in the province, given that most water systems are usually located in town and city centres.

17. The most tangible and immediate impact of the project was the improvement in the sanitation and hygiene in the community and the corresponding improvement in the health and general welfare of the residents.

18. Beneficiaries noted that the time they previously spent to haul potable water from remote areas was now being devoted to more housework and other constructive activities. The project also reinforced the unity and cooperation of the members of the cooperative, which was necessary not only for the continued success of their business projects, but also for the maintenance of their water system.

Lessons learned

19. The existence of a strong organization of project beneficiaries is critical in ensuring the efficient installation and sustained maintenance of the system. The cooperative's officials actually did almost all of the work, from contacting and negotiating with the water installation company, to supervising the construction of the system and securing the necessary water permits and laboratory clearances. In turn the farmer-members contributed by helping to construct the water system and setting up the pipe distribution network in the village.

20. This practical case shows that the existence of a farmers' organization can produce benefits beyond economic or business projects or traditional social advocacy activities. Cooperation between members of the cooperative served as the groundwork for the provision of other services to the members. For instance, the cooperative arranged for a consolidated electrical connection with the local electric company, so that the settlement is billed on one account, with the cooperative responsible for collecting the fees from individual households.

21. Although the cooperative is 4 kilometres away from the town centre, it had to secure a waiver from the town's water utility agency, which had apparently acquired prior rights and franchises over water tables in order to avoid conflict over water rights. This experience highlights the need for a clear water-rights policy.

22. There is a clear economic and social rationale for investing in basic utilities, such as potable water systems, in rural areas. If life in the rural areas becomes unbearable, it becomes difficult to stop the rural residents from migrating into town centres and cities for their survival. This will often result in congestion, urban squatting, health and sanitation problems as well as stress on water and other

utilities. Similar problems will crop up if Governments neglect rural roads, irrigation facilities and other basic infrastructure.

2. *Enhancing women's access to water through capacity-building and raising awareness*

23. Equitable access to water is a gender issue. Depending on cultural and traditional standards in the countries under consideration, the opportunities for rural women to access and control resources essential to their agricultural productivity are variable.

24. Rural women play an important role in the economic survival of their families. In addition to the unpaid work that they do, women produce most of the food in many developing regions. They are central to providing, managing and safeguarding water.

25. Yet women are often the ones who suffer most from the degradation of water and other natural resources. In rural areas, women, who are usually the custodians of family health, spend long hours fetching water for their families.

3. *Empowering Indian women to improve their access to water through training and raising awareness*

Context

26. In rural India, women spend several hours a day walking to conventional sources of water, like rivers, wells, ponds and lakes, in order to provide for their household needs. The introduction of tube wells and hand pumps has greatly improved the quality of life and reduced the distances that women needed to travel. However most of these wells were placed in places convenient for local authority bodies for maintenance, for example at the side of the road, not taking into consideration the users' needs. To overcome this problem, training was provided to women in the repair and maintenance of hand pumps, so that the wells could be located in the village.

Impacts

27. In instances where women received training, the ownership of these facilities greatly improved. The training provided the women with a sense of empowerment and control, allowing them to be self-reliant.

Lessons learned

28. The participation, and inclusion, of women in local governance bodies has greatly aided in making water supply a matter of priority. After the introduction of mandatory positions for women in the membership and for the presidency of local bodies, water became a priority in governance at the local level. Capacity-building for women and their involvement was essential to the improvement of water conservation and access.

4. Watershed based soil and water conservation in Kakkad region of India.

Context

29. The Kakkad region was marked by a high rate of male migration in search of employment, leaving behind women who were ignorant of water and soil conservation techniques. A project under the science and technology division of the local state put forward an initiative that centred on education and capacity-building for women in water and soil conservation.

Impacts

30. The project aimed at organizing women into groups, raising their awareness of the current problems and issues involved, while illustrating strategies that could be used to alleviate the effects of water and soil degradation. The women, and the community itself, were involved in the problem of identification, prioritization and watershed delineation. Soil and water conservation received attention from a well-informed community, which implemented strategies founded on a knowledge base that they acquired through this project.

Lessons learned

31. The examples in both of these Indian communities show that women's involvement in water maintenance and conservation strategies not only strengthened their capacities as active participants, but also resulted in water being put forward as a priority. Since women usually take on the role of water custodian, giving them access to technological knowledge, scientific management capacity and political empowerment allows them to more accurately administer water as a precious renewable resource.

5. The use of appropriate technologies for accessing water resources

32. The use of appropriate technologies has to be distinguished from traditional systems or practices. Technologies have to be adapted to local conditions and should be accessible to the producers to meet their specific needs. In other words, high-energy using technologies are not necessarily adaptable to the needs of certain poor rural communities.

33. Whatever technologies are used by water supply systems, they need to be maintained. Local populations are more motivated to maintain water supply systems if the technologies are adapted to their given environments and to their level of skill.

6. The use of traditional knowledge in irrigation: the **foggara** *system in Algeria*

Context

34. A traditional form of irrigation called *foggara*, whose origins can be traced back 3,000 to 4,000 years, is an alternative to modern irrigation. *Foggara* is used in southern Algeria on conventional farms and serves as a source of water for several oases in the Ouled Saïd, a human-made wetland that covers an area of 25,400 hectares in south-western Algeria.

35. *Foggara* was first practised in the Islamic Republic of Iran and brought to North Africa during the second expansion of Islam. The *foggara* system is a

complex network of vertical shafts dug into a sloping plateau overlooking an oasis. These vertical shafts or wells are connected by an underlying channel, which has a gradient flatter than that of the ground. Water is drawn from an aquifer within the plateau by the force of gravity and directed through the channel to the surface for agricultural or domestic use.

Impacts

36. There are three significant benefits of the *foggara* system of water delivery, including:

(a) Water loss through seepage and evaporation is reduced because a majority of the channel is underground;

(b) The need for pumps is eliminated as the system is fed entirely by gravity;

(c) The exploitation of groundwater as a renewable resource.

7. *The zai system: a traditional system of water conservation*

Context

37. Practised mainly in Mali, Burkina Faso and Niger, where it is known as tassa, zai is a traditional technique for conserving water and rehabilitating degraded land. The zai system is a series of human-made pits or holes, dug on abandoned or unused land. The purpose of creating the holes is to capture runoff precipitation, because the land is typically less permeable to water. The zai pits are filled with organic matter so that moisture can be trapped and stored more easily. The pits are then planted with annual crops such as millet or sorghum.

Impacts

38. The zai pits extend the favourable conditions for soil infiltration after runoff and they are beneficial during storms, when there is too much water. The compost and organic matter in the pits absorb excess water and act as a form of storage for the planted crops.

39. Zai pits are dug approximately 80 centimetres apart to a depth of 5 to 15 centimetres with a diameter of 15 to 50 centimetres. No special equipment or knowledge is needed to adopt the technology and the cost of implementation is mainly calculated according to the amount of time spent by the farmers in their construction.

40. The maintenance of the pits requires that farmers invest additional time in watching over, deepening and refilling them. However, the economic returns on the investment is 100 per cent, because the land brought under production is abandoned or unused land.

41. The success of zai planting pits has been documented all over the Sahel region, where the pits are often dug in combination with the construction of contour stone bunds and the planting of trees. One disadvantage of the system is that the pits may become water-logged during extremely wet years.

8. Conserving a traditional water system through modern enhancement: rehabilitating wells in Finland

Context

42. Finnish geology is particularly endowed with an environment that fosters small ground pockets that are fairly near the soil surface. This favourable circumstance allows landowners to dig wells and have access to water directly. As a result, there is a proliferation of wells in Finland, although many of the wells in the countryside are old and their structure has deteriorated over time.

43. The most common problem that affects the structure of the wells is when surface water leaks into the well, degrading the quality of the water in the well itself. Since these wells represent the most important water supply for farmers, the Government has put forward a financing initiative for structural upgrading of the wells in the countryside.

44. The Finnish Government, through the Ministry of Agriculture, has provided a guide on how to restore the wells and has supplied an aid package of 30 per cent of the reparation cost, with specific guidelines requiring strict adherence in order to qualify for financial aid.

Impacts

45. Farmers were able to utilize the benefits of modern technology to enhance the structural integrity of their traditional wells. Farmers were able to restore or rebuild wells to meet their drinking and household needs, while adhering to strict quality standards.

46. The ability of the farmers to utilize modern technological upgrading of a traditional water management tool greatly enables them to manage this resource in a more efficient way. Since farmers in rural areas are responsible for their own water supply, well reconstruction allows them to maintain control over the quality of the water that they extract and gives them the ability to utilize water for agricultural activities, such as dairy farming, without compromising either the quality or control of their water supply.

Lessons learned

47. This practical case serves as a good illustration of the benefits of upgrading traditional technologies in order for farmers to keep control over their water supply, while conserving the quality of the resource. This sometimes requires governmental support, which is often lacking in developing countries.

III. Management of water supplies

A. Participatory methods

48. In order to be equitable and sustainable, water management and development has to be conducted on a participatory basis, with decision-making occurring at the lowest appropriate level. All water users and stakeholders, especially farmers, men and women, young and old, both in developed and developing countries, whose

actions affect the quantity or quality of water, should have a say in water management. The following examples illustrate the benefits of involving farmers in the decision-making processes.

Specific experiences

1. ***Farmers in Sweden participating in an awareness campaign to enhance the quality of water***

Context

49. The Swedish parliament has adopted 15 environmental quality goals, many of which concern agricultural sustainability criteria. A 2020 target has been set by the Swedish Government to achieve these goals (except for the climate objective, which has to be implemented by 2050). An innovative and complementary approach to the scientific and legislative implementation of these 15 new Swedish environmental goals has been initiated by the farmers themselves. For some time, farmers have advocated that participatory methods, cooperation, involvement and voluntary approaches would achieve better results over the long run. The Government has recognized the importance of public participation and bottom-up involvement, which call for a larger choice of implementation methods to achieve the environmental goals.

2. ***Participation of Swedish farmers in the project: "Focus on nutrients"***

50. An interesting illustration of farmers' participation in Sweden is the project entitled "Focus on nutrients", which focuses on the protection of water from pesticides and the reduction of nutrient losses in the water. Focus on nutrients is a joint-project between the Swedish Board of Agriculture, the County Administration Boards, the Federation of Swedish Farmers and a number of companies in the farming business.

51. The project takes the form of a campaign, officially launched 2001, which aims at providing training and advancement of the overall objective of the project, encompassing the entire flow of nutrients on the farm. The campaign will continue for at least five years. The ultimate objective of this campaign is to increase the efficiency of nutrient management on farms through raising awareness and knowledge sharing. Individual farm visits are organized by farm advisers, placing the farmer at the core of this campaign, and there are ongoing study circles.

Impacts

52. It is too early to evaluate the project and its effects on water quality, however expectations of the outcomes from the campaign are high, both in the farming sector and among public authorities.

53. Farmers show high interest, with around 4,000 participants covering 44 per cent of the arable land in the southern part of Sweden.

54. An important factor in the success of the project has been the great number of organizations involved. About 40 different farm advisory bureaux, with 200 advisers, are involved on a part-time or full-time basis, to provide environmental advice on farms.

55. The most important method used is called "farm-gate nutrient balances". This method of nutrient balances has been successfully used in a previous Swedish project, where farmers calculated yearly nutrient balances for seven years. The results indicate that there is a great potential for improvement, with the most visible progress achieved when a farmer calculates the nutrient balance for the first time.

3. Farmers water quality management groups: a voluntary farmers initiative

56. In some places in Sweden, farmers have started to organize and collaborate on the improvement of water quality at the local level. These groups usually consist of 10 to 30 farmers that gather around their local stream, carrying discharge from their farmland. The motive for this voluntarily work is to use a bottom-up approach to the improvement of water quality and to stay ahead of authorities in this regard. An important part of the work is to increase knowledge and awareness of methods of cultivation that are important in preserving the quality of water. Evening classes are commonly given and study trips are organized to other farmers or to field experiments where measures to reduce nutrient leaching are tested.

Lessons learned

57. Even though creating incentives for all users to participate in water management processes is complex, the returns in terms of improved water management, reduced conflict and the long-run sustainability of systems make this a vital investment.

4. Participatory activism through volunteering: Indian village of Monody

58. The village of Monody was experiencing irrigation problems owing to the fact that one of the major canals, which was approximately 28 kilometres in length and which was used to deliver water, was silted up and nearly non-operational. The silting meant that the canal was no longer fully functional for carrying water to the fields. Previous requests to the local government had gone unheeded, as the government itself did not have the budget to undertake such a project.

59. A planning commission from the government of India initiated a proposal to undertake a development initiative by mobilizing the collection of all locally available technical, financial and physical resources. Subsequently a village development committee was set up to administer the project. One of the most important features of this collaborative effort was the ability of the village to supply free labour for the project. The village committee worked out that the project's duration was going to take 3,000 man-days of labour. It approached 3,000 households in the village to provide one member of their household for one day of labour, or wages to employ one person. The majority of the households supplied the project with free manpower, and the village, in turn, provided food for the labourers.

60. Work on the project was carried out daily. Upon completion, the work was inspected by the Engineering Department. The canal has now been restored to its full working condition. The Agricultural University also provided inputs, advising the village on issues such as soil restoration, plantation and pest management. As a result, a significant improvement in the agricultural production of the local villagers has been observed, as well as an increase in their economic standing.

Lessons learned

61. In this example, the Government played an advisory role, but the village itself reaped the benefit of its own collaborative effort in spearheading the project. The communal effort and organization illustrates that chances at success are improved by the participation and mutual help of local communities. It is also clear that the community took the initiative to resolve its problem using available resources.

B. Participatory frameworks

62. Community-based participation through the creation of consultation frameworks must be a prerequisite for successful water management.

Specific experiences

1. Water Users' Associations in Tunisia

63. The Tunisian Government has decided to transfer the management of irrigation and drinking water schemes to Water Users' Associations. The involvement of water users in the management of the resource has been very important in changing the social concept of water and in redefining its value in economic terms. Increased awareness of the scarcity of water and the need for its rational use has been a success of this policy.

Context

64. Water users' associations (WUAs) have a long history in Tunisia, having been first created during the early 1900s. These associations were charged with solving water management problems and ensuring efficient water distribution. In 1987, their mandate was redefined to include the implementation, operation and maintenance of irrigation-drainage or potable water supply infrastructures. The associations are financially autonomous and managed by a governing council, which includes a president, a treasurer and elected members. In Tunisia, the associations are responsible for more than half of the public irrigation schemes in the country.

Impacts

65. In 2001, water access and distribution in rural areas was increased by 90 per cent through the efforts of water users' associations and the *Société Nationale d'Exploitation et de Distribution des Eaux* (SONEDE), a government agency. There are 2,470 water users' associations operating in Tunisia: 63 per cent are responsible for providing drinking water, 34 per cent for irrigation and 3 per cent for both. The associations have alleviated the impact of poverty in poor communities by improving access to water resources.

66. The Government's policy of transferring the management of water services to water users' associations has been successful because of the establishment of the Fonds National de Solidarité. This government programme was created in 1992, with the aim of providing infrastructure in rural areas. The skills of water users' associations in the financial and technical management of water services were reinforced by this programme. The Fonds National de Solidarité is funded through

voluntary contributions by public and private enterprises, international development agencies, private individuals and the national Government.

2. *The cost of water and of its efficient use*

67. Who should pay for the use of such a scarce resource as water is indeed a complex issue, which needs to take into account several factors.

68. Farmers, through the development of rational systems in managing water resources, can achieve substantial quantity and economical savings.

3. *Finnish cooperatives and the price of water*

69. The example of Finland can be used to illustrate the ability of farmers to organize in order to maintain low prices for water resources. In rural Finland there are about 1,000 water cooperatives and about 400 small limited water companies. A majority of these water associations service very small towns and villages that, on average, have less than 200 inhabitants. Among these associations are cooperatives, which service less than 100 inhabitants. These associations have grown in significance as the most important source of water supply in rural Finland.

70. The cost and investment of running a small-scale water cooperative is very small. All cooperatives are licensed by the Government and are allotted a limit as to the amount of water they are allowed to extract per day.

71. The Finnish Government also makes financial programmes for further investment available to cooperatives. In addition, members may choose to participate by providing labour instead, in order to decrease costs for projects that require reconstruction. Cooperatives have their own wells and distribution networks, and complete control over prices. As a result, cooperatives can offer water at reasonable prices to their members because the price of water is not influenced by fluctuations in the market.

72. Water cooperatives also have the benefit of networking with other participating cooperatives. This cross-organizational aspect allows for a far greater level of manoeuvrability and adaptability in various situations. If, for example, the water quality in one region is not good, the cooperative may buy water from a neighbour cooperative or a community-owned water network. This form of inter-cooperative assistance allows for these associations and their members to benefit from mutual aid that is low in price and dependable.

73. Cooperatives are a vital component of the Finnish rural sector and a good example of how mutual organization, cooperation and activism work in unison to achieve inexpensive access to water.

C. Innovative partnerships

74. Farmers often have the willingness, although not necessarily the required means (financial, human, institutional) to cope alone with improving water management systems. They often need to be supported and encouraged to take on initiatives. In this regard, the key to better water outreach is the development of innovative partnerships. There is therefore a need for appropriate frameworks to build and implement partnership initiatives to manage water.

75. Organizations and water users often do not have the finances, knowledge, right institutions or incentives to use new technologies. The private sector has the means but often does not have the experience to ensure the efficient and equitable water management policies that national authorities might otherwise implement. Partnerships are therefore needed.

76. New forms of partnership also need to be promoted. Instead of separate government agencies for irrigation, water supply, sanitation and environment, effective water management organizations should include new combinations of public sector, private sector and farmers organizations to seek fitting solutions. For instance, management of river basins and irrigation areas should be in the hands of local and regional governments as well as farmers' organizations.

77. There is also an urgent need for cooperation between donor agencies and the industry, in order to achieve the transfer and adaptation of the best technologies for the benefit of developing countries. South-South technical cooperation is also an important element that should not be overlooked.

Specific experiences

1. ***Partnerships between farmers and owners of water quotas: the example of southern Algeria***

78. In the desert, land alone is not considered real capital, as its value is intrinsically tied to water rights. The ownership of water can be acquired through the investment of labour or money in the construction of a *foggara*, a traditional form of irrigation in the oases of the North African Sahara. Partnership agreements between the owners of unirrigated land and the owners of water quotas determine the share of water received by each recipient within the partnership based on the size or level of investment contribution. For regions of Algeria where this type of socio-economic arrangement still persists in conventional agriculture, the operators of *foggaras* have set up professional associations.

79. In one region of southern Algeria, there are partnerships, "association-sharing", between owners of unirrigated land and owners of water quotas for the production of palm dates. In this type of agreement, the owner of the unirrigated land transfers half of the property rights on his land to the owner of the water quota. After approximately seven years, when the palm trees first bear fruit, the "association-sharing" ends. At this time, the landowner assumes permanent ownership of the water on his land. Both individuals benefit from this type of partnership as each claims half the ownership of a palm grove that would not exist without *foggara* irrigation.

2. ***Partnerships between farmers and researchers "Swedish success story on catchments pesticide management"***

80. In the framework of a pilot study, which benefited a small catchment area in the south of Sweden, farmers achieved a 90 per cent reduction in findings of pesticide residues in a one-year period. The work was carried out in close cooperation with a scientist and a farm adviser. All farmers were interviewed on what procedures they were using when spraying. Yearly meetings were held on how to improve the management of pesticides.

Impacts

81. Information sessions led to an improvement in handling procedures such as filling and cleaning. Weeds on the farm were controlled mechanically instead of chemically in many cases, and in cases where spraying was continued it was conducted at a safe distance from the stream and wells.

82. After 10 years, concentrations of pesticides had decreased by 90 per cent in the small stream. Yields were not affected by the improved handling procedures, the measures were cost effective and the farm did not suffer any economic loss.

3. Partnerships between the farmers, the private sector and water rights authorities: example of farmers of "Zirking" (Upper Austria) and the water supply company "Fernwasservorsorgung Mühlviertel"

Context

83. The protection of groundwater in Austria — 99 per cent of Austrian drinking water is groundwater or source water — is achieved through both regulatory and voluntary measures. Voluntary measures include either environmental programmes which are part of the rural development programme, or contracts between farmers and water supply companies.

84. Frequently, the relationship between water supply companies and farmers who must tolerate regulatory production restrictions to protect water sources is burdened by tension and sometimes even outright confrontation.

85. Since some of the wells in the Zirking area do not supply the best quality water, in 1996, under the Austrian water law, it was named the first redevelopment area by the water rights authorities. Under the leadership of the agricultural chambers, the affected farmers organized themselves and established a democratically elected working committee, which developed, internally, into a decision-making forum and, externally, into the legitimate opposition to the public authorities and contact body. In addition, the committee had an important impact on the amendments to the Austrian water law concerning the existing groundwater redevelopment terms.

86. According to the new legal situation, the water rights authorities conceived the idea of enacting drastic production restrictions for farmers through conservation area regulation. The draft would have entailed an intensification of agricultural requirements, which met with strong opposition from farmers.

87. The counter-proposal from the agricultural sector reshaped the model to an effective, non-bureaucratic water pollution control concept tailored to practical requirements, while simultaneously abandoning the prospective regulations. The water rights authorities gave the green light to the pilot project, provided that the water pollution control resolution proves to be just as effective as the planned regulation in guaranteeing protection targets.

88. After numerous negotiations, an agreement was finally reached with the authorities and the water supply company with regard to financial compensation and the implementation of the package of measures. The water rights authorities agreed to that proposal. However, the degree to which individual farmers commit to any of

these measures remains their own decision. Nevertheless, an attractive system of premiums has stimulated a high level of participation.

Impact

89. Within the first year, 86 per cent of the eligible farmers signed on to the contracts — a high level of participation, although the area covered by the original plan was ultimately reduced in size by almost half.

90. The excessive terms regarding the use of herbicides, which had been solely a precautionary measure and would have accounted to a near application ban, were eliminated through negotiation, with the difficulty of applying regulatory conditions giving way to a more intelligent model, with a catalogue of measures built on the Austrian environmental programme.

91. After this experience, the farmers of Zirking are convinced that voluntary participation in the water pollution control project and the simultaneous responsibility that grew from it, was the best way to achieve the successful protection of groundwater.

Lessons learned

92. The example above shows that local partnerships with contractual regulations between farmers and water supply companies can prove successful and are well accepted by the water rights authorities as a non-bureaucratic way to achieve a common goal: the protection of drinking water resources.

D. Efficient and rational use of water resources

93. Increasing the efficiency of water use in farm operations makes economic sense, ensuring that scarce water resources are protected for future generations.

94. Sustainable agriculture should be based on a wise use of all available resources. Technical improvements may not be sufficient when cultivated crops are not suited to the climate and to the availability of the water resource. For this reason, it seems important to combine both technical and managerial means and to seek an optimal combination of all water uses.

95. Increasing the combined value of all water uses calls for more attention to water quality, rather than just quantity issues. Waste disposal, therefore, becomes critical to sharing water among different uses. Upgrading efficiency in all water uses is of utmost importance. In short, the managerial approach should be multisectorial.

Specific experiences

1. Water audits: an innovative approach to agriculture in the United Kingdom

Context

96. An agricultural water audit is a detailed analysis and account of water use in an agricultural operation. A complete water audit includes both an outdoor and indoor component, which must describe where, how and why water is being used in a

farming or livestock operation. It should also include how water use can be reduced without compromising crop quality and yield or animal welfare.

97. An agricultural water audit should be simple, yet effective. The process should highlight the practical steps that the farmer or grower can take to create an immediate impact on a farm's water management. The loss of soil, nutrients and other farms inputs as diffused pollution is reduced when water use is analysed and accounted for.

98. The National Farmers Union in the United Kingdom launched its Water Wise campaign in November 2000 to promote efficient water use on the farm and to demonstrate and discuss best irrigation practices. In the summer of 2001, the Union conducted a survey among all its members to document water use on farm operations. It found that farmers were taking the initiative to increase the efficiency of water management on their farms.

99. The Water Wise campaign is an effort by the National Farmers Union to encourage the agricultural industry to improve water use efficiency ahead of impending European and national legislation. A guide called "Water Wise on the Farm, a simple guide to implementing a water management plan", developed by the Environment Agency and LEAF (Linking Environment and Farming) organization, and supported by the National Farmers Union, was launched in November 2002.

100. Five simple steps for carrying out a water audit and developing a water management plan are outlined below:

- Identify how much water the farmer is using and its cost
- Water use inventory
- Calculate how much water the farmer is using
- Identify and compare water efficiency activities to reduce water use
- Create, implement and review the farmer's Water Wise action plan.

101. After choosing an appropriate water efficiency activity, a Water Wise action plan must be created and implemented. The action plan includes: (a) how the farmer plans to save water; (b) targets for water savings; (c) targets for financial savings; and (d) who is responsible for each action.

102. When implementing the plan, the following issues must be addressed: (a) staff, family and conductor awareness of the need to save water; (b) timing of improvements; (c) routine maintenance and checks; and (d) monitoring and reviewing progress. It is very important that a review be conducted after a plan has been implemented. The ideal time for a review is approximately a year after the plan has been implemented.

Impacts

103. The results of the Water Wise Survey demonstrate that farmers are very conscious of water management and are pursuing measures to reduce waste and improve water efficiency. A summary of the results of the Water Wise Survey reveal that:

- Two thirds of respondents said they are more efficient with their water use today (2001) than they were five years ago

- More than half of the respondents made plans to improve their water efficiency over the next five years
- Nearly 40 per cent either collect rainwater or recycle water for use on the farm
- Nearly 70 per cent have invested in reservoirs or storage tanks in order to store water for use later in the year
- Fifty per cent of respondents use scheduling techniques in irrigation to make sure they are using water at exactly the right time of day to avoid waste
- Eighty per cent of respondents regularly test soil moisture levels in order to ensure delivery of appropriate levels during irrigation
- More than two thirds of those who irrigate store water for use later in the year.

2. ***Drip irrigation in Kenya: a cost-effective method for small farmers***

Context

104. Agriculture in the country is mainly rain fed. Irrigated agriculture is underexploited, with only 13 per cent of the country's irrigation potential being utilized. Despite the creation of the National Irrigation Board for irrigation management, little progress has been made in increasing the hectares of land under irrigation.

105. Some of the problems that have plagued the National Irrigation Board include: lack of participation of farmers, competition from cheap imports, high running costs of schemes, and inadequate funding from the State.

106. For many smallholder farmers, the high cost of irrigation equipment makes them reluctant to adopt irrigation technology.

107. The introduction of a simple, cost-effective drip irrigation system has made it possible for many farmers to irrigate their fields and kitchen gardens. This system is easily assembled and can be adapted for individual farm conditions.

108. The drip irrigation system consists of a network of porous or perforated piping that is installed on the surface or below ground. This plastic piping is usually laid alongside the rows of planted crops, allowing water to be directly applied to the root zones of the crops in a slow and controlled manner that reduces evaporation loss.

Impacts

109. The use of this technique reduces water use by 40 to 60 per cent, while the increase in yield can be as high as 84 per cent.

110. Advances in drip irrigation technology have made it more cost-effective and accessible to smallholder farmers. In 1996, the Kenyan Agricultural Research Institute introduced bucket drip irrigation kits developed by Chapin Watermatics. A typical bucket drip irrigation kit costs $19 and includes a 20 litre bucket, or a 200 litre drum, drip tape, filters, rubber washers, male and female adapters, two supple tubes, bard fittings and a screen filter.

111. The buckets are mounted on a stand one meter off the ground with drip lines connected at the bottom. Water is poured into the buckets and released under pressure. This system is considered a low-head drip system since standard drip

systems operate under greater pressures. In dry areas, where water has to be carried for long distances, this system is ideal as it requires less water and it allows every drop to be used efficiently.

Lessons learned

112. Drip irrigation is a good example of a low-cost device that helps farmers increase their yields while using water resources efficiently. In particular, approximately 70 to 80 per cent of drip irrigation users are women, who use this technology to maintain their kitchen gardens. As a result, the introduction of drip irrigation has enabled many families to have vegetables in their diets all year round, and in some cases it has allowed them to sell the excess to supplement their incomes.

IV. Policy directions

113. A wide variety of specific experiences have been discussed in the present paper, yet all of them show that farmers and rural communities are motivated and willing to become responsible for efficiently managing water resources, and for developing new and innovative agricultural production methods that conserve their water supplies. A policy approach based on stakeholder participation and giving responsibility to users in the management of water resources is proving to be an effective way of using water well.

114. In the cases where farmers engage in protecting water resources on a voluntary and participatory basis, this has proved to be beneficial to their living and production conditions. It has also been seen that collaboration and dialogue with public authorities often proved to be valuable.

115. Multistakeholder partnerships also appear to be an effective tool for good management of water supplies. Even though it is important to set up clear rules and regulations to support the efforts of farmers in managing water resource more efficiently, legislation alone is not always the only way to solve problems. Informal agreements between farmers' organizations and other stakeholders, such as private companies and research institutions, represent valuable alternative methods that need to be given further consideration.

116. Raising the awareness of farming communities on ways to improve production while using water resources more efficiently must be given a higher priority, especially in those regions where this is not developed. For that reason, farmers and their organizational capacities need to be strengthened, enabling them to be proactive in safeguarding this natural resource. Farmers know their natural environment well, and helping them with structural problems, such as finding the necessary resources (financial, human, institutional), will help them use their unique knowledge in the best way. Collaboration is thus of the utmost importance.

117. Collaboration with the scientific community needs to be encouraged as it is an essential partner in developing technologies and farming techniques for water conservation that build on the local knowledge of farmers.

118. Farmers have interesting experiences to share and the capacity to change and improve their standards of farming, and their standards of living.

119. Access to water is critical to agriculture, and agriculture is critical for food security and rural development. "Win-win" partnerships are badly needed in order to face the challenging issue of protecting our precious natural resources, while at the same time doubling world food production to meet the needs of the growing population.

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Discussion papers submitted by major groups

Note by the Secretariat**

Addendum

Discussion paper on water, sanitation and human settlements submitted by non-governmental organizations

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I. Introduction

1. Issues relating to water, sanitation and human settlements are indeed complex and invariably inter-connected, although an overall understanding of how base issues function together is something few can claim to know. In this regard, an integrated approach is essential, and the lack thereof is perhaps the biggest barrier to effective implementation of programmes on these issues.

2. A crisis of global magnitude is looming owing to inadequate access to safe drinking water and proper sanitation. The compelling statistics are well-known and urgently demand action.

3. A fundamentally new approach to water, sanitation and human settlements will be needed if the aim is to satisfy the water needs of 8 to 10 billion people while protecting the ecosystems that sustain our economies and terrestrial life. Evolving strategies to ensure sustainable livelihoods and communities is at the heart of a resolution to this crisis.

II. Perspectives of non-governmental organizations on the status of implementation of Agenda 21 and the Johannesburg Plan of Implementation in relation to water, sanitation and human settlements

Issues that require attention, including identified obstacles and barriers

4. There are many issues that arise with regard to the issues of water, sanitation and human settlements. To identify the root-causes for the failure of implementation of policies in this field, we must provide a perspective on the complexity of the problem. First, we present the barrier of low public participation.

A. Public participation

5. At the root of much of the failure of policy in this area is the lack of public participation, including that of organized forms of the public such as non-governmental organizations (NGOs). Such participation, some would argue, is the fourth pillar of sustainable development. Participation is low owing not only to governance failures, but also due to lack of awareness. People still do not understand the concept of sustainability and do not know how they can contribute to its achievement. In this regard, the lack of focused attention in the education system may be a factor. In any event, there are gaps and divergences in the efforts of Governments and NGOs to increase awareness among citizen groups.

6. Governments need to support and reinforce the efforts of the NGO community in this respect. This would lead to greater participation of the public in promoting sustainable development, especially at local levels. In the United Kingdom, issues of sustainability are now being included in school curriculums, for example, through the Sustainable Design Awards for 16 to 18 year olds and the Sustainable Technology Education Project for 11 to 16 year olds. Such programmes should be encouraged, replicated and amply funded to increase awareness.

7. At the intergovernmental level, avenues for public participation in managing transboundary watercourses will be essential to ensuring better governance and reducing conflict among nations. An example of this is the 1995 Protocol on Shared Watercourse Systems in the Southern African Development Community (SADC) region, signed by 13 countries. The Protocol promotes public awareness, public participation and environmental impact assessment as management tools for transboundary watercourses. Within the same region, the 1999 Shared Rivers Initiative seeks to achieve equitable distribution of water resources in the Icomati River Basin and, eventually, in other international river basins. The initiative, which has established a basin wide research agenda and a network of scientists, hopes to foster research that generates legitimate data in a transparent and politically acceptable way and to develop a methodology that can be applied to other, more complex, basins in the region. There are numerous other examples, all illustrating the enormous added value of public participation in decision-making.

B. Water

1. Water is a fundamental human right

8. The fact that water is not treated as a basic human right remains a major impediment to equitable access, distribution and use of water. Water is a fundamental life-support, which cannot be treated as a commercial commodity, with supply and demand manipulated to increase its value and with alternatives that can be substituted. Water is a public trust issue that must not be privatized. New developments in international human rights law provide a viable framework to measure and improve government performance. The Committee on Economic, Social and Cultural Rights of the United Nations has elaborated specific rights, roles and responsibilities at different levels and provides an enforceable framework for recognizing water as a human right. For instance, the Committee has determined that Governments are now accountable to taking specific, measurable steps towards fulfilling the right to water. It has also specified in detail the rights of communities, the obligations of Governments and even identified what constitutes a violation.

9. The right to water is included in many other laws, including the Convention on the Rights of the Child, the Convention on the Elimination of All Forms of Discrimination against Women, the Protocol of San Salvador and others. However, these and other human rights obligations are not being taken seriously enough by national Governments.

2. State sovereignty

10. Governments must assert their primary responsibility for providing and regulating water and sanitation services. The obligation to protect the right to water includes the obligation to prevent third parties, including corporations, from interfering with the enjoyment of that right. States must therefore retain sovereignty over water as a resource and adopt effective legislation and strong regulatory frameworks to ensure that third parties do not deny rights of equal access or pollute or inequitably extract water resources.

3. Incoherence in governance

11. Good governance implies the existence of a firm public authority responsible for fair distribution and equal treatment of users. It must ensure that the provision of services remains within the ambit of the public authority closest to the user. Public participation in decision-making and participation in reviewing, monitoring and evaluating the quality of services provided will ensure transparency. Flexible modes of management must be explored. At present, incoherence prevails at both the policy formulation and institutional levels, hampering the implementation process.

(a) Policy incoherence

12. There is an absence of policy coherence within and among various government departments. There is little or no coordination among various agencies and actors. The lack of transparency in decision-making and participatory processes adds to the lack of ownership of actions and decisions at the local community level.

Lack of integrated water resource management policies

13. The absence of adequate emphasis on integrated water resource management policies and plans presents a major barrier in dealing with issues associated with water, sanitation and human settlements. Rivers, lakes, wetlands, forests and all other freshwater ecosystems are not just sources of supply, they are also habitats for a wide variety of plant and animal species. These ecosystems also perform valuable services for human societies, such as moderating floods and droughts, purifying water and sustaining fisheries. Nothing but a holistic ecosystem-based approach will suffice in addressing these issues.

Cross-cutting issues, water, sanitation and human settlements

14. Poverty and access to water have been repeatedly shown to be directly related. Unsustainable consumption and production patterns have a marked effect on people living in poverty, which in turn leads to resource degradation. The "domestication" of international commitments or securing "country ownership" of international policy prescriptions as a way to ensure functioning and sustainable local markets is one way forward in addressing linkages between international commitments, national policy goals and national budgets.

15. The focus on the Millennium Development Goals has been accompanied by a narrowing of the policy focus on a small number of blueprint models for water management and water delivery, such as privatization as a panacea for weak service delivery by national and local governments and a renewed attention to the need for large scale infrastructure.

16. Whereas these approaches have not proven their effectiveness in contributing to poverty alleviation, sustainable development or achieving the Millennium Development Goals, the singular focus on these water management and delivery options is crowding out alternatives that merit equal attention from Governments, donors and multilateral institutions. It is important to incorporate these approaches in the water management plans that are scheduled to be prepared by 2005 according to the Johannesburg Plan of Implementation.

17. In point of fact, NGOs and other local actors, such as community organizations and local governments have a key role in identifying and developing options to

improve water management and service delivery. Too often, these initiatives are not encouraged let alone supported with resources. They are severely hampered by central policy decisions that fail to recognize their potential and limit their scope.

(b) Institutional incoherence

18. Coherence is a stumbling block to policy implementation, not just at the level of policy formulation but also at the institutional and inter-institutional level.

19. At the community level, governance can be improved by increasing the capacity of the community to raise funds and mobilize internal human and financial resources. Communities know their needs and their potential, and are well placed to outsource funds for community-scaled water developments.

20. At the international financial level, the rules and conditionalities of the International Monetary Fund (IMF) to control the public debt of developing countries must be modified in the specific case of water, sanitation and human settlement programmes. Budgetary constraints always impose greater burdens on the poorest of the poor. Specific directives should therefore be in place for protecting the public budgets for water and sanitation supply to the poorest communities. Any payments for water by users should not enter into government budgets as tax revenue. They must only be seen as payments for services.

21. Given renewed attention of multilateral financing organizations and bilateral donors for large scale infrastructure projects to help attain the Millennium Development Goals, it is of major importance that recommendations of the World Commission on Dams are followed on a national level, such as is happening in Nepal, Pakistan and South Africa. From the perspective of establishing effective participatory processes and identifying sustainable options for water management and provision, the key recommendations and guidelines of the World Commission on Dams are:

(a) To assure that decision-making processes related to large scale infrastructure projects allow for prior informed consent of all stakeholders, including local actors;

(b) That alternative management options are considered in the decision-making process.

Water privatization takes priority

22. Although the introduction of market mechanisms and an increased role of the private sector may theoretically lead to socially equitable and environmentally sustainable development, the introduction of economic instruments in the creation of water markets requires complex regulatory frameworks and institutions.

23. There is a tendency, however, to consider economic instruments and market mechanisms as an adequate way to respond to existing weaknesses of the public sector. As such, the increasing attention towards private sector involvement and the creation of markets for those goods and services that have been part of the public domain is a logical follow-up of the structural adjustment programmes and current Poverty Reduction Strategy Papers (PRSPs) process of the World Bank, which call for a diminished role for the public sector.

24. In countries with weak institutional and legal frameworks, such an approach brings tremendous risks, and can generate new inequities and produce further stress on the environment. Therefore, the potential of water markets and private sector involvement should always be considered in nation-specific, institutional, socio-economic and legal contexts. Such policy analyses should always set out to assure access to clean drinking water as a basic human right, as well as to protect the ecological, economic and social (livelihood) functions of water-related ecosystems.

25. Endemic water shortages created by drought, inequitable geographic and social distribution of supply, population growth, wastage by agriculture and industry, lack of pollution control standards coupled with poor or non-existent waste water treatment cannot be addressed under most privatization schemes. It is Governments and their ability to govern resources, that need strengthening, hand-in-hand with civil society and local communities.

26. Addressing these problems often requires democratic and governance reforms, as was recognized in the Ministerial Declaration of The Hague on Water Security. The reality is that the present global market for water supply technology and services is large, undiversified and inequitable. This $400 billion dollar industry is controlled by just a few large multinationals, which subsidized, receiving export credits from their Governments and sharing in the benefits of development loans to the countries in which they agree to do business.

C. Human Settlements

27. Sustainable human settlements mean settlements where everyone's needs are met, using ways of managing resource use and waste generation that do not pass on costs to other locations or to future generations. It is crucial that people have the fundamental human right to housing.

28. Despite the work undertaken within the processes of the United Nations Conference on Environment and Development and the second United Nations Conference on Human Settlements, many problems persist and inequalities are growing. There is an urgent need for new approaches and for disseminating and scaling up existing examples of successful approaches.

29. International society should refrain from generalized approaches to issues confronting human settlements. Policy and support, including financial support, should focus on local action already initiated and on how communities and neighbourhoods can help themselves. Within this basic framework there are many different issues that must be considered.

Justice

30. Within cities there are major inequalities between neighbourhoods, something that city-wide indicators too often obscure or ignore. Poor neighbourhoods usually have the worst facilities, the poorest environments and inadequate economic development. This inequality contributes greatly to exclusion and the rise of security problems within cities. Urban regeneration schemes are extremely important to meet the needs of those suffering from environmental and social injustice, but these schemes rarely consider mapping neighbourhood-level environmental pressures, nor are they always participatory. Low-income settlements are often heterogeneous, with

certain groups finding themselves excluded within them. Other groups such as the elderly, the disabled or people of different ethnicities may also be excluded from local decision-making processes and power structures.

Poverty

31. Most Governments set their income-based poverty lines too low for urban populations, because they make little or no allowance for non-food needs. This means that they underestimate who is poor (and the depth of poverty) in those places where non-food needs are particularly expensive, that is in most cities where many or most poor groups face high costs for housing, water (purchased from vendors because they have no official supply), keeping children at school, health care, transport (to and from work and accessing services) and fuel. In many countries, the same income-based poverty line is set for rural and urban dwellers, even though many costs are higher in urban areas or in particular districts. The increasing use of the 1 United States dollar-a-day poverty line also greatly underestimates the scale of urban poverty because most urban households cannot meet their basic needs with an income of a dollar a day; the more monetized the economy and expensive the city, the more the dollar-a-day poverty line understates the scale of urban poverty.

32. There are also many aspects of urban and rural poverty that are not directly related to income levels, for instance civil and political rights and other democratic rights and the rule of law, or only partially related to income levels, for example poor quality housing and inadequate provision for water, sanitation, drainage and health care, which are often caused as much by ineffective governance as by the inability of poor households to pay.

The built environment, including housing

33. Human settlements consist of buildings, infrastructure and open spaces. Where buildings are built, how they are built, with what materials, for what purpose and who owns them are all elements that need to be considered in developing sustainable settlements. In many countries in the developing world, the regulations governing building standards were established in the colonial era, and were often copied from those of the colonial power. Most do not allow for the use of affordable, appropriate building materials, which are often more sustainable. In Kenya, for example, reform of these regulations has made a significant contribution to allowing poor women and men to build and occupy legal dwellings.

34. Many cities are experimenting with: ecological building; new social housing projects that prevent the insecure, poor living conditions that have marked low-income neighbourhoods across the world; decentralizing business districts and shopping districts; and building transportation hubs in such a manner that they invite use of public transport systems. In the case of the existing built environment, many richer nations have programmes to increase the energy efficiency of buildings and increase the "liveability" of neighbourhoods. They must be continued and scaled up.

35. Internationally, Governments have agreed to the target of the Millennium Development Goals to significantly improve the living conditions of at least 100 million slum dwellers before 2020. Yet this is an unambitious goal given that there are 800 to 900 million people living in slums and that, by 2020, if action is not taken, 120 million new slum dwellers will have joined the ranks, thus outpacing the target. More improvements are needed in the form of land-distribution and land-

ownership, new building programmes and more attention to extending and improving basic infrastructure for water, sanitation and drainage. Many initiatives to improve the living conditions in slums are undertaken by organizations of slum-dwellers themselves. Many national Governments are responding to those needs, yet more could be done, especially in the field of microfinance.

36. The privatization of housing, especially in rich countries, decreases opportunities for the poor to access such housing. Massive privatization in some of the newly independent States has put over 90 per cent of the housing stock in private hands. This takes place alongside the growth in gated communities and increasing spatial and social segregation.

37. Community-based organizations have a key role in bringing about change. Despite the limited support they receive, they have had repeated success (see examples below), although too often they (and local NGOs) are excluded from the planning, construction and financial control of new housing and infrastructure.

Transport

38. The human love affair with individualized and motorized transport (primarily cars and scooters) continues to contribute to the deteriorating ecological conditions in cities and the consequent economic loss caused by traffic congestion. This is worsened by a steady decrease in public support for public transportation systems. Without policy coherence on the national level related to decreasing the use of cars, this trend is likely to continue. Priority should be given to good quality public transport, non-motorized forms of transport (including walking and bicycling that give, owing to the increased number of people on the streets, security as well as health benefits) and good communication systems.

Economic development

39. In this era of globalization, local communities are increasingly confronted with uncertainties owing to the relocation of production facilities and the closing down of subsidiaries of foreign-owned corporations. Many communities find their local industries more and more dependent, if not wholly owned, by distant multinational corporations. This increases economic insecurity and decreases the reinvestment of profits in local communities. Management of large corporate entities is no longer in any way attached to the local community. The threat of relocation hampers the ability of communities to cooperate effectively and on equal footing with local corporate entities to improve environmental conditions around industrial sites. The lack of corporate accountability is a major barrier to the development of inclusive local communities.

40. Local production and consumption, involving small and medium-sized enterprises in a participatory manner, can contribute a great deal to improving the local economy as well as the local environment, including through significant reductions in transportation costs. National and local governments are limited in what they can do to stimulate local production-consumption schemes by national or international trading and investment rules.

Urban planning

41. In many cities around the world there is a similar situation of concentrated business districts, industrial zones, residential areas (high and low density), including slums and urban sprawl. As urbanization increases, lessons about good practice in urban planning need to be widely disseminated. Good urban planning, involving real citizen participation, can contribute significantly to relieving the social and environmental injustices currently being experienced within human settlements.

42. Urban sprawl, owing to increased transport emissions and costs (with the adjacent issues of more people in cars than in streets, leading to increased security problems), imposes great strains on the living environment, and an even higher impact on surrounding lands. Moreover, the focus on city centre regeneration has led to neglect of the needs of the existing suburbs, making it likely that in the next decades we will be confronted with increasing problems there.

III. Activities and case studies of non-governmental organizations on the implementation of water and sanitation and human settlements projects

43. The activities of NGOs in the area of sustainable development projects are many and varied. Some involve direct actions to improve the living conditions in specific neighbourhoods, including actions to improve access to local water supply and sanitation, others tackle the surrounding natural environment or work to secure and improve participation mechanisms, while some undertake policy research and advocacy to create appropriate socio-economic conditions. The case studies below furnish a body of knowledge rooted in the experience of practitioners rather than theorists, illustrating the practical challenges faced and overcome.

44. A paper of this nature is unlikely to capture the enormous amount of activity undertaken at all these levels by the tens of millions of community-based organizations and NGOs worldwide. For instance, in Latin America, from the late 1960s onwards, it was largely local NGOs that developed more participatory models of working with low-income populations in tenements and squatter settlements, while they also helped fight for a return to democracy and for more accountable local government. In Asia and Africa, NGOs working with community organizations have been at the forefront of challenging the large-scale evictions promoted by national, state and local governments, as well as developing more effective models for upgrading squatter settlements.

45. There are two different kinds of partnerships to increase effectiveness in poverty reduction and sustainable development efforts. The first is through working with the private sector, especially for urban infrastructure (including provision for water and sanitation) and, in some cases, housing finance. The second is working with the urban poor, including their community organizations and local NGOs. As far as extending and improving the provision for water and sanitation, privatization proved disappointing: it did not succeed in bringing in large new sources of capital for investment from private markets (which had been one of the justifications for promoting it); and private companies were interested primarily in large cities with sizeable middle classes rather than the smaller, poorer urban settlements where most

of those without adequate provision actually live. In the area of housing finance, some private sector or public-private partnerships succeeded in expanding the number of modest-income households that could access housing finance, but had little or no success in reaching the poorest groups.

46. The second kind of partnership has been more successful. In at least 11 nations, there are now federations formed by the urban poor and homeless that have developed their own poverty reduction programmes, drawing on their own resources and capacities and negotiating with local and national governments for support. In most of these nations, there are also NGOs that work in very close partnership to support the federations. In many other nations, comparable organizations are developing.

A. Case studies on water and sanitation

1. Rainwater harvesting

47. In Africa, the International Rainwater Harvesting Association has been promoting a broadly designed platform to ensure that rainwater harvesting technologies are a fundamental part of sustainable development. Recognizing that the majority of people in Africa suffer from poverty resulting from food insecurity and scarcity of drinking water, the Association works to mainstream rainwater harvesting as a readily available local resource in development agendas for sustained livelihoods and Millennium Development Goal implementation strategies. The Association stresses the importance of synergies among various ministries of water, rural development, environment, housing and economic development, as well as the need for national Governments to establish institutional frameworks that encompass rural, urban, peri-urban environments to promote and design five year plans of action on rainwater harvesting. Strengthening rainwater harvesting networks will facilitate the promotion of, and cross fertilization of, knowledge, promote the building of a database of best practices and strengthen regional cooperation in the African continent. The Association also endeavours to mainstream rainwater harvesting expertise into educational policies and works with educational institutions to widely disseminate such understanding.

48. In Pakistan, the use of the rainwater harvesting concept in water management and local area development in the drylands for combating desertification and poverty is provided by the Society for Conservation and Protection of the Environment. The Society is currently working in three districts, Malir, Dadu and Tharparkar in Sindh Province. The Society has launched a campaign to protect agricultural and pastoral communal lands and to promote rainwater harvesting through building small check dams and water collection ponds in the villages, with the help of local communities. Such activities have resulted in the enhancement of aquifers and expanded the availability of water for drinking and livestock use. The Society is now incorporating water purification into community development by introducing biosand filtration technology.

2. Integrated Slums Development Programme, Pakistan

49. Also in Pakistan, the Integrated Slums Development Programme of *Anjuman Samaji Behbood* (ASB) in Faisalabad has been facilitating the laying of water and

sanitation systems in low lying areas of the city, utilizing the community's own resources in an innovative way.

50. In Hassanpura, NGO research showed that the residents paid heavily for the purchase of water and solid waste collection. In 1995, cash spending of Hassanpura equalled $100 on a daily basis when average household income per household was $2. Residents also were spending inordinate amounts on medicines, house repairs and the procurement of basic services. After three years, through self-help and the work of ASB, residents financed and constructed their own primary and secondary sanitation and water works and set up maintenance of infrastructure in collaboration with the municipality. As a result of the efforts of ASB, 5,302 households now enjoy water and sanitation services, 109,499 feet of pipes have been laid and 17.3 million rupees, or $0.299 million United States dollars, have been earned by residents of low income areas. In the absence of this work, residents would have paid 850 million rupees, or $14.66 million dollars, over 10 years for medicines, water supply and solid waste collection.

51. The fundamental work of ASB has been in aligning stakeholder responsibilities and relationships. The NGO has progressed beyond participation to orchestrating and mediating previously estranged stakeholders to collaborate, while staying within its specific mandates. The community constructed its own tertiary and secondary sanitation works, linking them to primary municipal works. In its relations with local communities, ASB clearly established that it is a teacher not contractor.

3. Hornad River Basin Coalition, Slovak Republic

52. In 2002, in the historical region of Upper Abov, located in both Hungary and Slovakia, the civic association Water Partners International (SOSNA), started the Hornad River Coalition between 14 villages in Slovakia and 19 villages in Hungary. The Slovakian area is host to a number of large pollution sources, including steel plants and waste incineration plants, although other regions of the river basin are characterized by well preserved oxbows and wetlands, hilly areas covered by forests and important cultural and historical sites. A "river coalition", which is a cross-sectoral agreement prepared with the cooperation of interested groups along the selected watershed, including local self-governmental groups, the river management company, the environmental protection agency, local industry, farmers, schools, NGOs and small businesses, was set up. Secondly a "river contract" was written, signed by all participants and expressing their willingness to realize concrete activities for the improvement of ecological, social and economic conditions in the watershed. Participants also accepted responsibilities such as decreasing pollution by certain limits, adopting clean technologies and carrying out practical watershed-friendly activities. The "river contract" has now been signed by 25 organizations from all sectors.

B. Case studies on human settlements

1. Slum-dwellers federations

53. **India**: The Indian NGO, Society for the Protection of Child Rights (SPARC), and its alliance with women's cooperatives (*Mahila Milan*), formed by slum and pavement dwellers and the National Slum Dwellers Federation, are working in many

different locations in India to improve housing and living conditions and basic service provision as well as to support savings groups reaching hundreds of thousands of low-income dwellers. This alliance, based on what low-income groups and their organizations can do for themselves, has shown how work in many different areas can contribute to poverty reduction, including community-based and community-managed savings and credit groups, house construction, the development of community-designed, built and managed toilet blocks and community-managed resettlement programmes. With some 700,000 households active in 52 urban areas, the alliance has managed resettlement programmes involving over 20,000 households and a community-managed public toilet programme serving hundreds of thousands of low-income dwellers.

54. **South Africa**. The South African Homeless People's Federation and its support NGO, People's Dialogue on Land and Shelter, have helped secure land for housing for tens of thousands of its members and also helped them design and build new homes with provision for water, sanitation and other infrastructure. The Federation has around 100,000 households as members, formed into over 1,500 autonomous savings and credit groups that help poor households build their own asset base and provide access to credit to shield the poor from economic shocks. Perhaps as importantly, the Federation has demonstrated to national, State and local governments the capacity of urban poor households to design, build and manage their own homes and neighbourhoods much more cheaply and effectively than the contractor-built "low-income housing estates" that the Government also funds. The South African Federation has also helped many other urban poor federations to set up and expand into other African nations.

55. **Kenya**. The Kenyan NGO, Pamoja Trust, and the urban poor federation (*Muungano wa Wanvijiji*) work in many informal settlements where a high proportion of Kenya's urban population live — in Nairobi and several other urban centres. Building a consensus within informal settlements and a representative community structure is particularly important in Kenya because of the conflicting priorities within settlements between landlords (the "structure owners") and their tenants as well as the ethnic divisions that politicians have long manipulated. The organizations of the urban poor are based on community-based savings schemes. Slum enumerations and house modelling initiatives undertaken by the federation (where communities develop their preferred design for housing) have helped to build local consensus on upgrading and tenure and develop community capacity to manage these issues. This also helps to build a critical mass of communities to engage municipal authorities or national government while building the capacities of its leadership.

56. Many other urban federations are also showing success: programmes under way in Cambodia responded to the effectiveness of the Solidarity and Urban Poor Federation there, while thousands of urban poor households have negotiated land sites on which to build in Zimbabwe. Despite the political difficulties in the country, the Zimbabwean federation has 45,000 members.

2. Networking, the Northern Alliance for Sustainability

57. The Northern Alliance for Sustainability (ANPED) brings together 100 NGOs from North America, Western and Central Europe, Eastern Europe, the Caucasus and Central Asia. Thirty members of ANPED are networks themselves, significantly

increasing the number of NGOs and community-based organizations linked to its work. For the past six years, ANPED has undertaken many activities within its Local Action for Sustainability Programme. The primary activity has been to link locally active NGOs and community-based organizations within the network, in exchanging skills, knowledge and experiences in order to excel at the local level in action for sustainable development, public participation and community involvement. Where possible, new subjects are introduced with the help of external experts. As such, a strong network of locally active groups has evolved, which ensures that, within the ANPED region, expertise exists to support local communities in becoming sustainable.

3. Global Action Plan for the Earth International

58. Agenda 21 established that sustainable development can only be realized if a strong local movement is initiated. In this regard, one vehicle that emerged is the "EcoTeam Programme", developed by Global Action Plan for the Earth (GAP). Developed by a team of international social scientists and consultants, the programme offers citizens not only a guideline for the adoption of a sustainable lifestyle but also a support structure for its day-to-day implementation. In an EcoTeam, 6 to 8 participants, mostly neighbours, set out their options to use less energy, fuel, water and materials in their households, aided by a coach, a workbook and a feedback system. In all 18 countries (northern including Central and Eastern European countries) where varieties of this programme have run, teams have found that they could easily reduce their use of energy by 5 to 30 per cent, with, as collateral benefits, lower energy bills and good neighbourly relations. An estimated 50,000 people participated, spread over 18 countries. Subsequently EcoTeam members have participated in other local sustainability initiatives, such as local Agenda 21 working groups, car-sharing schemes, twin city exchanges, Local Exchange Trading System (LETS) associations and campaigns for sustainable regional retail products and outlets.

59. However successful and innovative, the GAP organization worldwide has had a tough struggle for survival. Governments, utilities and other donors tend to be wary of supporting multi-issue, people-oriented approaches of this type. Secondly, although volunteers could easily be recruited for this positive empowering work, in most countries the period during which the public was ready to commit to this structured, predominantly green type of programme was rather short (1992-1997). Nevertheless, new varieties continue to be developed and used, including programmes for schools and communities.

4. Habitat International Coalition

60. The Habitat International Coalition is dedicated to action for the universal recognition, defence and full implementation of the right of all to a secure place in which to live in peace and dignity. The Coalition acts as an international pressure group in defence of the rights of the homeless, the poor and the inadequately housed. It promotes the creation of awareness among the public in general about human settlement problems as well as the exchange of information on these problems and their solutions among its members. It functions as a platform for the formulation of NGO policies and strategies in the field of human settlements and acts as their spokesperson in contacts with international organizations. The Coalition aims to attain these objectives by means of:

(a) Mounting campaigns, sometimes in cooperation with other NGOs and community-based organizations and social movements;

(b) Holding seminars and conferences;

(c) Publishing statements, reports, newsletters and other study and information materials;

(d) Undertaking research and other projects;

(e) Supporting networks and information exchanges among its members and other NGOs social movements and organizations;

(f) Other legal means.

5. Sustainable community movements in Appalachia, United States of America

61. Grass-roots movements in the poor rural areas of the Appalachian Mountains of the United States are working against a history of domestic exploitation, colonialism and landlessness, including:

(a) Mountaintop removal and the massive automation in the Appalachian coalfields;

(b) Deforestation caused by the impact of chip mills and air pollution related to coal-fired power generation and vehicle emissions;

(c) Hyper-development of higher elevations for tourism;

(d) Overconsumption of surface and ground water and contamination from mining, petrochemical, agriculture and weak development regulations;

(e) Corporate power usurping community rights;

(f) Continued deindustrialization and rising unemployment in southern Appalachia.

62. As national policies divert vast resources away from communities in Appalachia, environmental and social conditions continue to deteriorate. The Appalachian Coalition for Just and Sustainable Communities was formed in 2002 to stimulate networking and to use popular education and research to empower grass-roots change. The Coalition envisions an "Appalachian Agenda 21" and members are integrating global perspectives to inform their efforts towards that end.

63. Distressed communities are looking for development alternatives, not for aesthetic reasons but out of necessity. This thread binds the people of Appalachia with many others worldwide. The plight of Appalachia shows that even in "developed" nations, policies are developed and implemented that are not supportive of sustainable community development.

6. Experiences with local Agenda 21

64. Since 1992, around 7,000 local Agenda 21s have developed around the world. While these have been mostly led and managed by local governments, evaluation programmes show that the most successful ones are those where the local communities have played an active part in developing and running the programmes. The local Agenda 21 movement has also shown that it is possible to engage with communities on the theme of sustainable development and for communities and

elected bodies to work together on practical projects to improve quality of life locally while also helping meet targets globally. New networks, such as the European Sustainable Cities and Towns Campaign, have shown that success is often less about the issues being tackled and more about effective governance and cooperation between sectors and disciplines. For example: In Flanders in Belgium, the Government provides extra financing if local authorities commit to developing local Agenda 21s. The Government also supports a regional network of NGOs to act as support and focal point for civil society activities.

65. One positive example of the implementation of a local Agenda 21 initiative is in the town of Nakuru, Kenya, the fifth largest town in the country, at the edge of the Nakuru National Park. The local Agenda 21 process has allowed for the formation of key partnerships between a range of organizations, including the World Wildlife Fund (WWF) and the Kenyan Wildlife Service, local community-based groups, businesses, NGOs and donors. A strategic structure plan for the town has been agreed, which deals with the issue of environmental sustainability as well as meeting the needs of its residents. City-to-city cooperation, in this case between Nakuru and the Belgian town of Leuven, has also been a key part of the process.

IV. Analysis of the role of Governments and other major groups in relation to water, sanitation and human settlements

66. This section assesses the role played by Governments and the remaining eight major groups in implementing policies and projects relating to sustainable water, sanitation and human settlements.

Governments

67. Governments are genuinely committed to sustainable development and poverty alleviation, as reflected in their international pledges and numerous national policy frameworks. However, a viable mechanism for translating these aspirations into action is still missing and the response to requirements on the ground remains incredibly slow. The very first step is to develop water management plans by 2005, as called for in the Johannesburg Plan of Implementation, and to commit adequate resources to the attainment of agreed goals and targets. Policy autonomy is central, and must not be undermined by global economic liberalization rules or conditionalities imposed by the multilateral financial institutions and donors.

68. The vastly altered post 9/11 geo-political scenario, the elusive nature of peace, security and stability, increased military spending, counter-terrorism measures that have undermined human rights, the protracted war in Iraq, the quagmire of reconstruction, weakened multilateralism, unaltered and inequitable global trade and financial architectures have all coalesced to make the attainment of internationally agreed development goals, including sustainable development, more elusive than ever. This inevitably affects the level of development assistance required to realize these goals.

Business and industry

69. The consensus among NGOs is that business and industry retain the highest potential for affecting the achievement of the global goals and targets for water,

sanitation and human settlements. They are well placed to thwart, even subvert, attempts towards the realization of such goals. The challenge is to realize their potential within a framework of publicly accountable rules.

70. Multinational enterprises can provide employment, technology, training and financial resources to local communities in all these areas. In some cases, such enterprises have been known to introduce higher environmental, health and safety standards, but they have also become notorious in terms of profit repatriation, focusing on short-term profits and relocating the moment they smell declining profits. They also enhance economic insecurity by distancing themselves from the real needs of local communities and by not being adequately open and transparent in their dealings.

71. The small and medium-sized enterprises that form the bulk of local economic activity generally have better and closer ties to local communities. They also have an interest and stake in the local investment climate. They should become a stronger part of local sustainable consumption and production schemes and should be supported in order to contribute in more concrete ways to reducing the ecological footprint.

72. The willing acknowledgement of all segments of business and industry, including the accounting, investment and financial sectors, of the need to adhere to strong enforceable government regulations and standards will help in defining and refining their priorities and constructive roles. Community participation and enforced accountability are tools that can greatly contribute to maximizing their potential.

Trade unions

73. Organized workers can contribute significantly to improving the social conditions of people working for business and industry. In many cases, workers have hands-on experience with sustainability issues and have practical ideas for innovations and improving existing practices, such as those relating to saving water or reducing pollution. As major organizers of people, trade unions can contribute significantly in terms of educating their members on choosing a sustainable path of development that will simultaneously improve the quality of their lives while preserving the environment for present and future generations. The commitment, including an implementation framework, by the trade unions at the Commission on Sustainable Development to promote sustainable production and consumption patterns is a valuable example.

Women

74. Women are the most vital of all links in the sustainability chain. It has been proven, time and time again, that any activity at the local level that does not involve and empower women is a non-starter and bound to fail. No issue in the field of sustainable development is more relevant to women than water and sanitation. Yet in many regions of the world women remain marginalized from decision-making on these issues.

75. Gender mainstreaming is only now finding its way into the global vocabulary. Much more needs to be done to ensure it becomes second nature in thought processes and practical arrangements. Only when women are recognized as valuable

custodians of the ecosystems will efforts to improve service delivery at all levels bear fruit.

Youth

76. It is not simply a cliché that the future belongs to the youth of today. What they inherit from the policies we implement today will determine whether and how well they will live. Youth movements are gradually being geared into action and to take on a more proactive role in local planning for sustainability. They must be made more aware of the power they wield through broader awareness-raising programmes, and there ought to be greater opportunities for youth to participate in sustainable development processes.

Farmers

77. As primary suppliers of food products and raw materials for production, no one can deny the central role farmers play in terms of food security, food sovereignty and public health. Water is the life blood of their livelihoods and they have a major stake in ensuring a steady access to the water supply. They hold the key to sustainable water use and must jealously guard freshwater supplies. To be able to do this, farmers require all the support they can muster, especially at the local level. Traditional and small farmers have been marginalized in decisions regarding the choice of technologies, seeds, and practices. They are victims of agricultural systems and practices (promoted for decades by agribusiness, multilateral institutions and national governments) that are extractive and chemical-intensive, polluting waters and soil, as well as eroding biodiversity. While some farmers have organized themselves and begun to work with other civil society groups, much more needs to be done to ensure that their voices are heard and listened to.

Indigenous peoples

78. Despite recent United Nations efforts to address the concerns of indigenous peoples, it is clear that a lot more needs to be done if we are to protect their rights to their land, resources and knowledge so that they can sustain their livelihoods. Increased recognition by Governments and the scientific community of the water rights and knowledge base of indigenous peoples is needed. The scientific and technological underpinning of their knowledge base can be built upon for the benefit of all communities (for example, early warning systems for the prevention of natural disasters, the case in point being the floods in Mozambique, where indigenous communities had their own information).

Scientists

79. Closing the wide gap in the translation and transmission of current scientific knowledge to the wider global community is perhaps the biggest challenge for scientists. There is no shortage of studies on urban planning, sustainable housing, sustainable delivery of public services and the like. The scientific community in general and universities in particular have a duty to inform, share and help demystify their respective disciplines and to help all stakeholders to move from words to deeds towards a sustainable society. They must work more closely with community-based organizations and assist in identifying simple ways to make

sustainability a reality for all. At the same time, they must also acknowledge gaps in scientific understanding and promote the precautionary principle in resource use and management.

Local authorities

80. Local authorities are the obvious centres for community building, local planning and sustainable development. This group has, in many parts of the world, been identified as having ultimate responsibility for managing water, sanitation and even housing systems and they deserve more support and clearer roles within national structures. If they are to do their jobs properly, they must also have the right tools, adequate resources and access to information from all other stakeholders.

81. While many local authorities have done excellent work in raising awareness and promoting sustainability, many others remain closed to public participation and do not provide information to affected citizens. Given the right circumstances, local authorities are well positioned to focus various sectors of society on the setting and implementation of joint agendas, ensuring policy coherence and a holistic approach to community-building at the local level. In short, local authorities need to empower their constituencies while also being empowered themselves in this chain of implementation.

V. Conclusions

82. Water, sanitation and human settlements policies involve every area of public concern. As such, they must be addressed holistically and comprehensively. Whatever approach is settled upon, it must face the light of constant public scrutiny if it is to be effective and meaningful to the bulk of humanity. Making safe drinking water available is not only a technical problem, but also a social challenge, encompassing issues including ownership, community rights and management concerns, the issue of water wastage, the burden of repair and maintenance of existing infrastructure, corruption, lack of accountability, the choice of options and the quantity of resources allocated.

83. Achieving sustainable human settlements requires a cross-cutting (from the perspective of all three pillars of sustainable development) approach to building sustainable communities, rectifying environmental and social injustices (including gender aspects) and achieving sustainable production and consumption patterns, while ensuring economic and social innovation and development. Public participation (the fourth pillar of sustainable development) is crucial in this process. All this must be done while also meeting basic human needs.

84. Many successful examples of sustainable water and sanitation projects and human-settlement development are developed and managed by community-based organizations and NGOs, yet these groups frequently do not participate in national policy schemes or even grander international schemes. Policies are needed to reverse current processes marginalizing crucial groups in society that play a vital role in building sustainable communities and integrated water policies.

85. Globalization in its current form has increased economic insecurities, especially in poorer neighbourhoods. The lack of participatory structures and

accountability makes communities relatively powerless in ensuring environmental and social sustainability.

86. Human settlements are complex entities. Any strategy for sustainability needs to work with different disciplines and sectors, and just as every practitioner needs to understand those working around her or him, so Governments need to ensure that plans for sustainable development are integrated across the sectors and genuinely meet international targets while also meeting the needs of the poorest.

87. A primary concern is the protection and conservation of water catchment areas and the restoration of those that have been degraded and destroyed, such as wetlands. Deforestation and degradation of water catchment areas has been going on without adequate checks. The ecosystem approach should be integrated into water resource management policies at all levels.

88. Human rights standards have a key role to play in sustainable water development. The United Nations Committee on Economic, Social and Cultural Rights provides a framework for action that is anchored to legal accountability, which should be recognized by the Commission on Sustainable Development as a means to secure the right to water for all. As such, it should be reflected in future water management policies, including all national water management plans, which are expected to be in place by 2005.

89. The vital role of water resources in rural and urban livelihoods should be appreciated since water is an essential resource for reducing vulnerabilities through attaining food security, alleviating poverty and enhancing people's health.

90. There is a need to strengthen coordination and cooperation for the mobilization of both internal and external resources, and for the wise use of such resources, as well as to strengthen efforts to increase budget allocations for water resource management, sanitation and human settlements. Financial and other commitments must be honoured. The type and nature of conditionalities must be fundamentally reviewed rather than imposed. The donor community must rely less on standard blueprints for water development and pay more attention to small-scale water management and service provision options, which should be replicated and scaled up.

91. There is an urgent need to introduce innovative approaches in involving the private sector. The adverse impacts of resource privatization and overexploitation now call for firm regulations and strong enforcement. This will help conserve and improve the current rural and urban environments and promote corporate social accountability and good practices in private business.

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Assessing the human side of development

Introduction

Trade unions are pleased to participate in this review session of the Commission on Sustainable Development to assess progress in outcomes of the 2002 World Summit on Sustainable Development in the theme areas of water, sanitation and human settlement. Since 1992, when workers and trade unions were designated as a "major group" in chapter 29 of Agenda 21, they have worked in the Commission on Sustainable Development and other international bodies to draw attention to the "human side" of sustainable development — the so-called "social dimension". After being long given second place compared to economic and environmental concerns, this "pillar" was fully highlighted in the World Summit Plan of Implementation and Declaration and Agenda 21, which now provide a solid basis upon which to advance social priorities, along with environmental and economic ones.

Trade unions have analysed outcomes of the World Summit to identify priorities for workers and trade unions. We have also studied country reports to the Commission on Sustainable Development and other bodies, worker experience in countries and enterprises, developments in the corporate social responsibility debate, and the record of international organizations and instruments. That review substantiates the general perception of workers, their organizations and communities, that the last few years have seen a retreat from the World Summit vision of a better, more sustainable world. Much more must be done to eliminate poverty, launch sustainable production, create more and better jobs, and improve the lives of working women and men. Everyone must take responsibility for this challenge.

A. Reviewing progress where people work and live

1. Nowhere are the challenges to social development clearer than in the Commission on Sustainable Development 2004 theme areas of water, sanitation and human settlement. All three are crucial to development and affect the daily lives of workers and their communities. For this reason, we ask that the following issues form part of the focus for this Commission on Sustainable Development review process.

1. The extent to which the social dimension is being integrated into the implementation plans of governments and players in civil society

2. The World Summit Plan of Implementation and Declaration, and Agenda 21 all envisage a high level and balanced integration of economic, social and environmental dimensions of development. Their emphasis on poverty eradication focuses on measures to address the underlying and structural causes of poverty, unemployment and social exclusion and the insecurity they produce. Sustainable development requires a change in patterns of production and consumption. As workplaces are central to these patterns, they are a logical focus for action on sustainable development everywhere, especially as concerns the "human dimension".

2. Issues in the theme areas that link workplace with community

3. The thematic areas require us to consider links between workplace and community. The conservation and contamination of water supply and the high rates of disease near some industrial sites illustrate these links. Sanitation and waste treatment link workplace and public health, and we have ample evidence that a lack of attention to one threatens the other. Likewise, few doubt that transportation problems in modern cities relate directly to work, or that change in this area can be enhanced through well-planned workplace programmes. Finally, with continued migration of the world's population to urban centres, housing is emerging as a problem directly connected to poverty and employment status. Since so many of the topics reviewed at the current session of the Commission relate to work and the workplace, attention must be given to workplace-based programmes that can make all parties more responsible producers, consumers and agents of change, with a positive impact on industrial performance, as well as on domestic consumption patterns.

3. The relationship of theme areas to economic and social exclusion

4. The most pressing problems of water, sanitation and human settlements relate to poverty and health. Exclusion of both are growing in the world today. Today, 2.7 billion people survive on less than $2 a day and hundreds of millions are either unemployed or underemployed. Without a response to this fact, little can be done to change unsustainable patterns of development. In this regard, trade unions have championed the close link that exists between decent work and poverty eradication as advanced in *Working Out of Poverty*, the report of the ILO Director-General to the International Labour Conference at its ninety-first session, held in 2003.

4. The experience of vulnerable groups in the three theme areas

5. Trade and investment policies, increased competition, and fiscal and monetary austerity policies continue to penalize the most vulnerable groups, aggravating problems in water, sanitation and human settlement. This review cannot ignore the "dark side" of globalization: i.e., the majority of women who occupy the bottom rungs of the job ladder; the 250 million children who are forced to work because of deepening family and community poverty and government inaction; the people with disabilities who, if they have jobs at all, are often confined to low-paid and unrewarding work; or the too-old or too-young who are often excluded from work and social protection. This Commission on Sustainable Development review must also consider the reality faced by workers in specific sectors, e.g., the millions of low-wage and unwaged agricultural workers, those in the informal economy, and the 120 million migrant workers who daily encounter exclusion, racism, underemployment, and violence.

5. The role of labour practices in implementation of the outcomes of the World Summit

6. In recognizing the role that income-producing employment must play in a sustainable development agenda, the Commission, at its current session, must take on the point made in the ILO *Working Out of Poverty* report, that decent work can pave the way for sustainable development. Two of the clearest indicators are the adoption of core labour standards and of "just transition" programmes for workers

threatened by change. Not only should such indicators be developed and accepted, they should also become the basis of country reports, as well as those of business, industry, not-for-profit and public sector organizations.

6. The effects of cutbacks and commercialization of essential public services

7. As well as being crucial to economic development, water, sanitation and human settlement are services that are vital to the daily lives of all people, and as such, have clear implications for poverty and exclusion. Unfortunately, developments since the World Summit continue to compromise the ability and willingness of Governments to provide these services. Privatization and deregulation continue to replace public control and provision with private control. The review at this session of the Commission must therefore include an objective review of the effects of these developments, and the extent to which countries are providing services in water, sanitation and human settlement in a manner consistent with the outcomes of the World Summit.

7. Governance issues affecting workplace and community

8. Sustainable development relies on democratic forms of governance. In the workplace, this implies worker representation in decision-making and implementation, and in the community, it means local control over development by affected groups and individuals. Assessment of workplace and community democracy requires suitable development of indicators for transparency of decision-making, and access to information. These should measure the degree of public control of such areas as water, or such public services as education and health care.

8. Progress on cross-cutting themes

9. Cross-cutting themes which closely affect the three priority areas for the twelfth session of the Commission include:

- International harmonization of systems for classifying, handling and regulating substances
- Capacity-building, including education and training
- Gender, age and sectoral considerations
- Technology innovation and transfer
- Policies, practices and agreements on trade and finance.

9. The contribution of trade unions to this review process

10. When Secretary-General Kofi Annan launched the Global Compact in July 2000, he called for engagement and dialogue among the three major industrial partners. "Labour unions", he said, "can mobilize the workforce — for after all, companies are not composed only of their executives." He drew attention to the fact that workers and trade unions are part of industry as well as civil society; and highlighted the need to move beyond discussion to practical measures. Building cooperation calls for a much better understanding of trade unions and their capacity for implementing sustainable development. The economic and social restructuring of the last few years has faced many workers and their communities with contradictory survival choices — between threats to their way of life and planet, and short-term

survival needs for themselves, their families and communities. Trade unions can assist in this review to ensure that policy decisions accommodate both sets of survival needs. We have learned that what is on the table is usually related directly to the people who are around it.

B. Social responsibility: keeping records

11. Embracing the social dimension implies making observations, keeping track and conducting evaluations on progress at all levels, including the workplace. Trade unions offer their summary evaluation of: (a) corporate social responsibility; (b) trade union social responsibility; and (c) government social responsibility. The state of international organizations, instruments and cooperation for sustainable development is also discussed.

Review areas

1. Trade unions study trends in corporate social responsibility

12. Since 1992, a large number of companies have, either unilaterally or through various business or "multi-stakeholder" organizations, adopted codes and guidelines concerning corporate social responsibility and have participated in various corporate social responsibility initiatives. In view of the tremendous growth that has occurred in this area, trade unions are conducting a study of standards of social responsibility called *Corporate Social Responsibility: Results Matter*, in cooperation with academics and non-governmental organizations (NGOs).

13. While corporate social responsibility has attracted scepticism and pessimism, some of these initiatives do refer to significant aspects of communication and cooperation that may have been ignored by the Commission on Sustainable Development. In some cases employer organizations have endorsed standards in areas of decent labour practices and freedom of association that certain Governments have been unwilling to adopt. This is especially true of the Framework Agreements that have been negotiated by Global Union Federations with some of the world's largest multinational corporations. At the current session of the Commission, trade unions will circulate a summary of their findings.

14. A major concern is that corporate social responsibility is increasingly becoming a substitute for government action, as demonstrated by the growing emphasis on corporate social responsibility initiatives. Trade unions favour instruments such as the ILO *Tripartite Declaration of Principles Concerning Multinational Enterprises*, and the OECD *Guidelines for Multinational Enterprises*, because they are legitimate sources for expectations concerning multinational corporations rather than being set by the companies themselves. Furthermore, trade unions continue to insist that codes of labour practice for use in supply chains employ such internationally recognized standards as core ILO Conventions, as too many avoid references to workers' right to organize and join trade unions. Collective bargaining is so closely linked to ethical standards in employment that exploitation and abuse of workers can very often be linked to an absence of independent trade unions.

15. *Trade unions study corporate social responsibility*. This project examines standards, methodology and other criteria for assessing partnerships for sustainable

development as called for by the World Summit. Its focus is on the social dimension, and in particular, on fair labour practices. It includes: (a) a database of the growing body of codes of conduct and indices of corporate social responsibility to show areas of agreement, as well as shortcomings and gaps; (b) qualitative research into selected organizations to illustrate progress; and (c) recommendations for corporate social responsibility initiatives and partnerships.

2. *Trade union social responsibility links workplace to community*

(a) A healthy workplace in a healthy community

16. There are close links between healthy workplaces and sustainable communities that workers address through work site occupational health and safety committees and in collective bargaining. The link to water use and contamination is one such link, as workers raise concerns about access to clean, affordable water, and the likelihood of contamination of water sources at work, home and in the community. They are likewise addressing sanitation as a workplace and public health issue. Workers' health is often compromised in the workplace with a resulting growth in public health costs. While agricultural and migrant workers are often denied the most basic facilities, this problem affects almost every sector.

17. *International Transport Workers' Federation survey reveals a shocking lack of port facilities for seafarers.* In its global survey, the International Transport Workers' Federation (Seafarers' Trust) found that most of the ports visited had no welfare services at all, although several made claims to that effect in port directories.

18. Sustainable housing is crucial to social inclusion of workers. Trade unions are responding to a shocking lack of decent housing that exists wherever development takes place without regard to social implications. They have also been part of initiatives to tackle the difficult climate change issues involved.

19. *German Alliance for "Work and Environment" contributes to National Energy Plan.* German unions are collaborating with government, environmental NGOs and employers' federations in a programme to renovate buildings for climate protection goals, while creating sustainable jobs. Thousands of new jobs are anticipated in the construction, heating, sanitary and air-conditioning sectors, as well as in building services. (See *A study of the project, The renovation of a building — A chance for climate protection and the labour market* by Greenpeace Germany and IG BAU.)

20. In a growing number of work sites throughout the world, trade unions are addressing transportation problems that link workplace and community, because work-related travel is a major contributor to unsustainable patterns of transportation and human settlement. These are, furthermore, closely related to community planning and public services.

21. *Spanish trade unions lead energy transformation initiatives.* The Spanish unions, Union General de Trabajadores (UGT) and Comisiones Obreras (CC OO) have embraced a plan by European unions to work with governments, trade unions, NGOs and consumers and to break the link between economic growth and environmental degradation by guaranteeing access to energy and converting jobs into quality employment. They have collaborated with national and regional councils to initiate activities to substitute fossil fuel with renewable energy

resources through campaigns, documents, and educational activities. These have been supplemented by initiatives involving works councils, including a campaign, Work Council Commitment to Mitigate Climate Change, involving 170 work councils in efforts to reduce energy consumption and greenhouse gas (GHG) emissions, and an agreement with 45 town councils, trade unions, employer associations, universities and the Transport Authority to rationalize access to 700 workplaces with more than 80,000 workers, as well as numerous agreements for single companies and workplaces. (See: N. Hernando, *Spanish Trade Union Initiatives on Energy and Climate Change*, CC.OO, UGT-E, Milan, December 2003.)

22. Trade unions are also addressing approaches to the production and inappropriate disposal of vast quantities of waste, which signal unsustainable patterns of production and consumption. Waste quantities continue to increase, with two thirds of the total municipal waste generated in Europe still landfilled, and waste recycling rates increase only slowly. Waste management is a labour intensive industry, accounting for a high proportion of jobs in the environmental sector. It has also seen some of the most intensive pressure to privatize, with some of the world's largest multinationals involved. The public sector providers continue to play an important role, however. (See: S. Davies, *European waste management*, PSIRU, March 2003.) Resource use and waste are areas that are well-suited to workplace assessments as promoted by trade unions. Trade unions will be featuring the "Workplace Checker" at the current session of the Commission on Sustainable Development, which has been developed by the Swedish professional workers' trade union, the TCO Development Unit. It is accessed online by workers, with results collected and reported immediately as the basis for actions to improve the workplace. After completing the survey, respondents can access a chart that shows how their workplace ranks against a defined norm.

(b) Combating poverty and social exclusion with decent employment

23. Too many economic development strategies in a globalized economy depend upon the violation of core labour standards, a fact which has still to be addressed in international trade agreements. Human and workers' rights violations attract little interest, while relatively minor disputes over property rights generate economic effects and penalties. At the current session of the Commission the review must examine the "human" effects of inadequate regulation of financial markets, structural adjustment programmes, unpayable external debt (often inherited), and policies of central banks and international financial institutions. It must likewise evaluate the effect of government policies that entrust the areas of water, sanitation and human settlement to the "invisible hand of the market". Trade unions do not accept the argument that national sovereignty provides a mandate to violate human rights or deny basic services. Neither do we accept the defeatist notion that globalization has robbed Governments of the ability to protect citizens against violations of workers' rights or denial of basic public services. Governments can and must take action.

24. *The International Federation of Building and Wood Workers (IFBWW) launches Save-a-Child Labourer Campaign*. In 2003, the IFBWW launched its non-profit company CHILD LEARN (Child Labour Elimination Resource Network) in Agra, India, in its vision of a world free of child labour, where every child has access to decent schooling and children and workers' rights are respected. Some

2,200 children are currently in 15 child labour schools in the Indian states of Bihar, Punjab and Uttar Pradesh that IFBWW opened with the support of the Construction, Forestry, Mining and Energy Union (CFMEU) (Australia), Bat-Kartel (Denmark), FNV and FNV BOUW (Netherlands) and CLC (Canada). Local union campaigns highlighted the plight of child labourers and the lack of schools. The IFBWW seeks support for its schools by asking for sponsorship of a child of 50 Swiss francs per year, through the CHILD LEARN fund. It has already received contrib itions from many parts of the world. (Sponsorships or enquiries can be sent to: IFBWW — Coop Bank, 6-8 Place Longemalle, 1211 Genève 3, Switzerland.)

(c) Promoting social responsibility through workplace agreements

25. Working with employers and community partners, trade unions have developed a healthy tradition of dialogue, cooperation, and negotiation at the local, national and international levels, with joint work site health and safety committees and collective bargaining providing the two major vehicles for change. In addition, trade unions have been coming together by industry and occupation into global union federations for more than 100 years. Recently, they have concluded "framework agreements" that extend workplace gains in one country to others. In some cases, these have been stimulated by Global Compact discussions.

26. One of the first framework agreements was signed in 1988 by the International Union of Food, Agricultural, Hotel, Restaurant, Catering, Tobacco and Allied Workers' Associations (IUF) with Danone, a French multinational in the food sector. A recent revision allowed Danone to reduce its capacity, but protects the employment of workers, thus providing a model for addressing restructuring at a global level. Since then, many more global agreements have been signed by the ITF, IFBWW, the International Textile, Garment and Leather Workers' Federation (ITGLWF) and most of the other global union federations, addressing union rights, health and safety, vocational training, labour relations, employment trends, and community relations. Recently, the International Chemical, Energy, and Mining Federation (ICEM) concluded agreements in the mining industry that secure the right of the trade union to monitor the companies' global performance and address breaches with corporate headquarters — an important departure from most company codes of conduct.

27. The growth of international codes of labour practice is one of several trade union responses to the reluctance of Governments to implement core labour standards in the face of globalization. In December 1997, the ICFTU Executive Board adopted a *Basic Code of Conduct covering Labour Practices*, which provides guidelines on workers' rights to assist trade unions, NGOs and companies in negotiations or campaigns involving codes of conduct.

Table 1
Framework agreements: transnational companies and global union federations

Company	*Employees*	*Country*	*Branch*	*GUF*	*Year*
Danone	100 000	France	Food Processing	IUF	1998
Accor	147 000	France	Hotels	IUF	1995
IKEA	70 000	Sweden	Furniture	IFBWW	1998
Statoil	16 000	Norway	Oil industry	ICEM	1998
FaberCastell	6 000	Germany	Office material	IFBWW	1999
Freudenberg	27 500	Germany	Chemicals	ICEM	2000
Hochtief	37 000	Germany	Construction	IFBWW	2000
Triumph	38 000	Germany	Textile industry	ITGLWF	2001
Merloni	20 000	Italy	Metal industry	IMF	2002
Endesa	13 600	Spain	Power industry	ICEM	2002
Ballast Nedam	7 800	Netherlands	Construction	IFBWW	2002
Carrefour	383 000	France	Retail industry	UNI	2001
Chiquita	26 000	USA	Agriculture	IUF	2001
OTE Telecom	18 500	Greece	Telecommunication	UNI	2001
Skanska	79 000	Sweden	Construction	IFBWW	2001
Telefonica	161 500	Spain	Telecommunication	UNI	2001
Fonterra	20 000	New Zealand	Dairy industry	IUF	2002
Volkswagen	325 000	Germany	Automotive industry	IMF	2002
Norske Skog	11 000	Norway	Paper	ICEM	2002
AngloGold	64 900	South Africa	Mining	ICEM	2002
Daim/Chrysler	372 500	Germany	Automotive industry	IMF	2002
Eni	70 000	Italy	Energy	ICEM	2002
Leoni	18 000	Germany	Electronics/automative	IMF	2003
ISS	280 000	Denmark	Building cleaning/ maintenance	UNI	2003
GEA	14 000	Germany	Engineering	IMF	2003
SKF	39 000	Sweden	Ball bearings	IMF	2003
Rheinmetall	25 950	Germany	Defence/automotive/ electronics	IMF	2003

ICEM: International Federation of Chemical, Energy, Mine and General Workers Unions;
IFBWW: International Federation of Building and Woodworkers;
IUF: International Union of Food, Agricultural, Hotel, Restaurant, Catering, Tobacco and Allied Workers' Associations;
IMF: International Metalworkers' Federation;
UNI: Union Network International.
Source: ©Robert Steiert (IMF)/Marion Hellmann (IFBWW), 2003.

(d) Linking occupational health and safety to sustainable development

28. The World Summit link between sustainable development and worker health and safety has led to a ICFTU-Trade Union Advisory Committee (TUAC)/ILO/UNEP process to engage trade unions and their members in a process that would translate their long tradition and capacity in health and safety into a model for sustainable development at the workplace. It has been facilitated by an agreement (memorandum of understanding) with UNEP to explore and develop a number of tools, including a handbook to educate union members on the link between a healthy workplace and sustainable development. It will explain workplace assessments, give clear definitions for terminology and show how trade unions can "walk" through a process to assess what they are doing and how to link this to sustainable development. The process is overseen by a steering group composed of ICFTU/TUAC, ILO, UNEP and trade union representatives from Asia, Latin America and Africa, who communicate through an electronic forum. Based on a theme conference on occupational health organized by the Occupational Health, Safety and Environment Institute in Bangkok, in December 2003, and the results of a questionnaire, regional workshops are contemplated for Africa and Latin America, with the aim of developing regional approaches to workplace actions and assessment tools for sustainable development, and to refine this process for wider application.

29. *Workplace actions and assessment*. Agenda 21 and the World Summit provided a framework for joint employee-employer assessments that could potentially involve millions of workers in concrete changes to both production and consumption patterns in the workplace, as well as personal and community life, and win hearts and minds of the public for costly changes. Workplace assessments examine workplace performance according to agreed environmental, occupational and social criteria. The results can lead to joint plans of action to identify and resolve problems ranging from the simple (e.g., workplace water, energy and resources usage) to the complex (e.g., technology, employment issues or matters related to social security, and public health). They are effective because they build on a tradition in which employers already work with trade unions in work site committees to establish joint targets, design and administer programmes, monitor the workplace, keep records and report progress.

3. Progress on government social responsibility

30. Trade unions are currently engaged in a study on the record of governments on the "human side" of sustainable development, based on such sources as country reports to intergovernmental organizations. Our findings indicate the following priorities for the review at the current session of the Commission.

(a) A failure by governments to protect worker and trade union rights

31. Even though they are an essential part of democratic society, trade unions are being assaulted today in even the most democratic of countries. The ICFTU's *Annual Survey on Violation of Trade Union Rights*, based on a country-by-country review of how trade union rights are respected or abused, contains clear evidence that the stain of anti-union repression is spreading. More than anything else, the latest survey illustrates the devastating effects of a crude free market on workers' rights and shows how the map of trade union rights violations is expanding in size.

These frightening trends must be addressed in the current session, and more importantly, by member States.

32. *Violations of trade union rights reported in ICFTU Survey*. The ICFTU's *Annual Survey on Violations of Trade Union Rights* covers 133 countries and territories across the world. It notes 213 cases of murdered or "disappeared" trade unionists in 2002, with a terrifying record number of 184 assassinations, 27 attempted assassinations and 189 death threats in Colombia alone. Nearly 3,000 trade unionists were arrested worldwide, 1,000 injured and 30,000 sacked. The survey identifies the stubborn anti-democratic stance of certain States and fierce competition in the global economy as trends that can only be combated by international trade union solidarity and appropriate government action (see: http://www.icftu.org/focus.asp?Issue=tur&andLanguage=EN). Local unions are particularly vulnerable to acts of employer discrimination. Legitimate protests of economic crises are often harshly repressed, at the same time as efforts to engage in meaningful dialogue with governments or employers prove futile. Today, export processing zones present a symbol of hostility towards trade unions, even in democratic countries. According to the last ICFTU report, there were some 850 such zones at last count, employing nearly 30 million workers, primarily women in assembly plants producing household appliances, furniture and textiles. In most export processing zones trade unions are unwelcome and are often banned outright, which takes a visible toll on working conditions, environmental damage and living standards, especially in the areas of water, sanitation, waste disposal, and housing.

33. *International mission condemns abuse of trade union rights in export processing zones*. A Global Trade Union mission to the Dominican Republic in advance of a WTO Ministerial Meeting in September 2003 condemned conditions in export processing zones and demanded action by the WTO to halt trade-related worker exploitation. The mission cited abusive working conditions, brutal repression of attempts to unionize, use of thugs to terrorize union members, employer provocation of conflict, union-busting by exporters' associations, and complacency of governments (see http://www.icftu.org/).

34. Child labour continues in spite of universal condemnation, as unscrupulous company owners continue to use the cheapest form of labour available to cut production costs, even at the risk of endangering the lives of children who work the longest hours and are the worst paid of all workers. Some 250 million children from 5 to 14 years old currently toil in developing countries, nearly half of whom work on a full-time basis. An estimated 171 million of them work in hazardous conditions, with adverse effects on their safety, health (physical/mental) and moral development. Hazards also derive from excessive workloads, physical conditions, and duration or hours of work. In addition to the number of children in hazardous work defined by ILO Conventions Nos. 138 and 182, it is estimated that about 8.4 million children are trapped in the worst forms of child labour as defined in ILO Convention No. 182, including some 5.7 million in forced and bonded labour (see: http://www.icftu.org/focus.asp?Issue=childlabour&Language=EN).

(b) A poor record on worker and trade union rights

35. Trade unions can expect to face severe repression in dictatorships. However, even in democratic countries, they are facing increasingly unfriendly governments as competition to win world markets is undermining collective bargaining, the most

basic tool for trade union action. ILO Core Labour Standards define a range of human rights at work that are universally applicable regardless of conditions or stage of national development. The World Summit agreed that these should be incorporated into all planning and implementation, with special attention to rules governing trade, investment and economic development. Unfortunately, our research shows that countries have been slow to ratify these instruments, and even slower to actively enforce them.

36. This must be an area for review at the 2004 session of the Commission. During this session, trade unions will circulate our analysis of ratification of key ILO Conventions, as well as trade union country-by-country Sustainable Development Profiles to the Commission. These will demonstrate that regard for labour rights is scanty and uneven. Reluctance to enforce these standards appears to be based on a concern over its effect on investment and development, at the same time as we have seen a massive shift of production, particularly in the textile and garment industry, to parts of the world where labour practices are often deplorable. Violations of workers' rights in emerging supply chains, including child labour and forced labour, are increasingly coming to light, a trend that must be addressed at this session.

(c) A "business orientation" in government social responsibility

37. The drafting and application of standards is a primary function of government and its institutions. There are qualitative differences between governments and private enterprises that are crucial to the type of governance that will make sustainable development a reality. Corporate social responsibility stresses the voluntary nature of business responsibility, management initiatives and systems, and the responsibility of management to identify and work with "stakeholders". Not only do "monitoring" and "verification" lose much of their meaning in such a context; the concept of "stakeholder" itself often obscures the true nature of relationship in an enterprise. Workers are more than stakeholders in the workplace! Events have shown that sound legislation, backed by a strong regulatory regime, is the only guarantee of minimum conditions and rights in the workplace and broader society. Proper enforcement mechanisms, training for staff, and political will are needed to make them work. At this session, the Commission must review these changes in governance, particularly as they affect worker and citizen participation.

4 Assessing progress on access and control of vital services

38. The provision of services associated with water, sanitation and human settlement must form part of the Commission's current review of poverty and exclusion. Recent trends towards liberalization, deregulation and privatization in recent years, and in particular, the resort to public-private partnerships has increasingly transferred many government roles to business, along with the social responsibility associated with it. Two decades of experience have clearly revealed the costs and dangers in this approach, and shown why Governments must play a leading role in guaranteeing services that are key to sustainable development and a decent life for all.

(a) "Public/private partnerships": One "P" too many!

39. There are threats to the most basic of human services in water, sanitation and human settlement. Many national and subnational governments are joining with

international institutions to allow public services to be sold, or transferred to corporations. Since 1992, the world has seen a wave of privatization and deregulation that has had the effect of replacing a large measure of public control of services with private control. This has particularly drastic effects for lower income populations and vulnerable groups, as access to or influence on basic services and resources become more closely related to wealth. This erosion of government's role has the direct effect of undermining the link between democracy and equity — creating both a "governance gap" and a "democracy deficit". Even where vestiges of public regulation and oversight have remained, "de facto deregulation" occurs because of understaffed, under-resourced services, or worse yet, because of corrupt or illegitimate political interference (see: http://www.world-psi.org).

(b) Privatization and deregulation of services have not fulfilled their promises

40. Instead of relieving the strain on government, or resulting in more affordable, accessible service delivery, the result where water, sanitation and waste disposal and other services related to human health and well-being have been deregulated or privatized has been greater income inequality, less access and increased social and environmental damage. Local governments have been particularly hard-hit, as the trend has left them with the responsibility, but not the necessary financial resources — leading to further degradation of services, and reinforcing the case for privatization. It has also led to a de-skilling of government departments, which lose their capacity to regulate, let alone offer the services.

41. *Public Services International leads global anti-privatization campaign.* The Public Services International is a global union federation of 20 million workers in 150 countries, many of whom work in public water and sanitation authorities. Together with its national affiliates, the Public Services International has taken the lead with an information and organizational campaign to build awareness, expose the fallacies associated with privatization, and organize and lobby Governments to retain public ownership and control of these human services. In these initiatives, they have partnered with hundreds of community, research groups and environmentalists in cities and countries around the world.

(c) The case against privatization of water and other vital human services

42. Trade unions believe that there is a contradiction in boosting profits from such vital services as water, energy, health and education, especially where these profits are withdrawn to another country and individual shareholders. We therefore urge the Commission at its current session to review the extent and effects of privatization, including the role of the international financial institutions, in promoting an economic model oriented towards private sector and market forces.

43. As most of these services constitute a natural monopoly, competition does not really exist. Water users, for example, are a captive market without any choice in the purchase of water (70 per cent of private water contracts are delivered by the two largest French water corporations, Suez and Vivendi). Even so-called "success stories" tend to hide a multitude of negative results, e.g., consortiums that raise tariffs because of currency-exchange fluctuations, or stop paying concession fees to put pressure on a public authority; major increases in "non-accountable water" under private management; lack of formal monitoring of new extensions of service, etc.

44. *Public Services International Research Unit yields leading edge research on services.* A Public Services International partnership with researchers in Greenwich University has yielded a wealth of in-depth studies into public sector issues. The Research Unit produces dozens of studies annually, e.g., Water finance: a discussion note (January 2004); Resistance and alternatives to energy privatization (December 2003); Problems with private water concessions: a review of experience (November 2003); A critique of the EC green paper on services of general interest (September 2003); Public solutions for private problems: responding to the shortfall in water infrastructure investment (September 2003); Water privatization and restructuring in countries of Central and Eastern Europe and newly independent States 2002 (April 2003). (See http://www.psiru.org/reportsindex.asp.)

45. In its review, the Commission will see that more than 90 per cent of water services are currently being delivered by the public sector, a fact that is too often obscured. It will also see the record of the international financial institutions vis-à-vis public sector providers, and ask why capital markets have not been more creative in devising mechanisms for financing. Any review of water and other vital human services must also deal with pricing and cost recovery, recognizing that subsidies are flawed instruments and do not reach many of their target groups under a profit-based pricing regime. For-profit delivery means that the final risk is borne by consumers and their communities. The role of democracy, accountability, transparency, participation and inclusiveness in delivery of services such as water must be taken into account, as must the value of forming partnerships between cash-strapped governments, other public bodies and workers.

5. Assessing progress on international cooperation

(a) The changing role of international organizations and instruments

46. Given the increasingly globalized state of our economy, international standard-setting and regulation of business are necessary conditions of good governance. However, many Governments and governmental institutions are failing to accept this role, and are sidelined as responsibility is increasingly transferred to private interests. Trade unions believe that the role of international bodies and instruments has never been more important. However, too many of today's standards are based on the assumption that, while having binding enforceable rules to protect commerce is considered quite legitimate, a corresponding approach to protecting basic human rights, including workers' rights is all too often relegated to loose measures with little enforcement. In this regard, trade unions favour international agreements that involve national Governments directly; e.g., the ILO Tripartite Declaration, and the OECD Guidelines for Multinational Enterprises. Unfortunately, these suffer from a lack of support from Governments.

(b) A lack of emphasis on the social dimension in international initiatives

47. While the World Summit provided a firm basis for the social dimension, some international instruments and organizations continue to subordinate social concerns to economic and environmental issues. Trade unions have identified two initiatives that are particularly illustrative of this point.

48. *Trade unions call on GEF to incorporate social outcomes of the World Summit.* Further replenishments of the Global Environment Facility (GEF) must more clearly

incorporate a commitment to integrate social objectives within its programmes and to work with those institutions that are involved in them. This could be enabled through institutional linkages with the ILO, the intergovernmental body with competence in the social dimension, as well as with UNEP, WHO and others. Employment, workplace strategies and social implementation should be placed on the GEF's radar screen, for research and development into social and employment impacts of change and integrated planning (see http://www.icftu.org/displaydocument.asp?Index=991216411&Language=EN).

(c) Lack of an appropriate development mandate for the ILO

49. Nowhere is the lack of attention to the social side of sustainable development more evident than when it comes to the International Labour Organization (ILO). Established in 1919 to deal with labour and social issues, this tripartite organization has not been assigned the lead role it should be given in this area, as contemplated in the Declaration of Philadelphia (1949). As a minimum, the Commission's text should recognize all those human rights that have been identified by the ILO as constituting fundamental rights at work, as summarized in the Declaration on Fundamental Principles and Rights at Work. All ILO member States are obliged to respect, promote and realize the principles concerning these fundamental rights and they are essential to any concept of sustainable development. This Commission review must address this long-standing oversight, and give the ILO a far stronger mandate to deal with the social side of sustainable development.

(d) A crisis in international governance

50. Too much standard-setting for the social dimension remains voluntary, lacking in support and legitimacy, consisting of a myriad of standards, procedures, programmes and projects with little consistency in purpose, reporting mechanism or evaluation. While unilateral, voluntary action can play a role in acceptance and adaptation of standards, it is not an adequate substitute for legally binding requirements, and certainly cannot, by itself, address the social consequences of a globalized market. Furthermore, some features of international agreements and instruments render implementation and verification impractical in the face of increasingly elaborate supply and value chains; hence the growth of a corporate social responsibility industry of private labour inspectors and social auditors. Finally, too many instruments are optional, leaving companies free to decide their responsibilities to society.

51. The result is a vacuum in many areas, particularly in monitoring, which requires a continuous presence, not an occasional intervention of a "social auditor". The only true "independent monitoring" is by the people most affected, i.e., trade unions and community members. Finally, international governance is hampered by a fixation with a "business case" for socially responsible behaviour; which does not distinguish between the interests of shareholders and those of workers who have both common and competing interests with their employers.

C. Trade union recommendations for workplace and community

52. The results of this review should enable the Commission, its member States and major groups to reassert a people-centred model of development that meets the

needs of people and protects the environment. Our challenge is to find ways of working together to achieve this goal. Towards this end, the outcomes of this session should provide for the following.

1. **A clear link between poverty alleviation and decent employment**

53. Vision, political will and available capacity must be brought together to develop guarantees of decent work for the millions of workers who live in poverty and exclusion. This will require a new commitment of resources as well as policy, democratic governance and dialogue to define common goals. International institutions such as the World Economic Forum and WTO must address the need to globalize social justice. This review process must reinforce all of these aspects.

The International Textile, Garment and Leather Workers' Federation calls on countries of the South to take labour standards out of competition

54. Work is the best route out of poverty, but unprotected work can be a passport to permanent poverty, as seen in the textile, clothing and footwear industries. China and Mexico now dominate the American clothing market, but a job surge in those countries has not meant higher wages or rising labour standards for the their workers. In Mexico, the real minimum wage fell almost 50 per cent in the 1990s, while innumerable reports of unpaid wages and similar abuses have come out of China, according to ITGLWF (see http://www.itglwf.org/).

2. **A stronger commitment of the Commission on Sustainable Development to the goal of decent work**

55. This Commission review must confirm that poverty eradication depends on the creation of not just any work; the work must be of acceptable quality, allowing people dignity and personal fulfilment, with a measure of socio-economic security for themselves and their communities. Our conclusions can be guided in this regard by the ILO's, *Decent Work: Report of the Director General to the International Labour Conference, 87th session*, 1999.

3. **The value of joint action by building on occupational health and safety**

56. This review must encourage joint action at all levels, but particularly in the workplace. Trade unions and employers have developed extensive capacity for dialogue, cooperation and negotiations which can be extended to social and environmental questions at the local, national and international levels. This review must result in a challenge to industry to engage with social partners to engage in joint action. We urge the Commission to promote joint workplace health and safety committees as a model for joint action. Finally, the Commission must establish as a positive point that trade unions exert pressure for needed change, either alone or working in coalitions with other popular and mass membership organizations.

4. **Human health and sanitation and the HIV/AIDS/water connection**

57. The current review must draw attention to the connection between HIV/AIDS and water/sanitation, as AIDS hits hardest at countries and communities that lack access to basic services. Over half of the people newly infected, 11.8 million people, are between the ages of 15 and 24 years and live in countries without safe drinking water or hygienic sanitation facilities. It is unconscionable to allow such diseases to

spread for lack of "simple" needs like clean water. Sustainable development is impossible without a healthy population.

58. *Global unions "map" HIV/AIDS partnerships.* As trade unions at the local, national and international levels are now sponsoring hundreds of projects and campaigns to combat the HIV/AIDS pandemic, global unions have started an international mapping exercise to catalogue who was doing what and where. This "map" shows that much of the activity has occurred not at the international level, but in the regional activities of the organizations concerned. Not only does it serve as a useful reference tool for trade union organizations; it also provides a guide to those considering future engagements or activities in this field. (Enquiries are welcomed at http://www.hiv-aids@icftu.org.)

5. Consensus in workplace and community

59. Fixing today's problems requires a broad political consensus that includes trade unions, employers and other organizations in civil society — at the local, national, regional and international levels. Democratic governance can only be achieved on the basis of full involvement of the social partners in genuine dialogue, with a strong role for the State and public authorities. This review must issue a call for fair and balanced dialogue built on trust, confidence and full recognition of workers' rights. Trade unions can have a positive impact in this regard, as we have a history of constructive dialogue between the unions and management. Codes of conduct, consultation agreements, new strategies for the representation of the workers and the creation of international networks represent new avenues for enlarging relationships between industry leaders and trade unions. Collective bargaining will continue to move to the international level, and enlarge its scope to include such concerns as childcare, quality of employment, pensions, health and safety, discrimination at the workplace, benefits and services.

6. A commitment to freedom of association and individual rights

60. Recognizing the important role that trade unions play in the workplace and community, this Commission review should recommend a positive role for them, and seek commitment to stem violations of fundamental rights. Trade unions will continue to forge alliances with other groups, notably NGOs that share their belief in human rights and human services, as such alliances have proven to be a key element in successful campaigns concerning water and other public services. We believe that progress comes about when people are involved in their own development and defence of their own interests. Unemployment and poverty create fuel for unsustainable forms of production and consumption, while insecurity weakens the resolve of ordinary people to engage in change.

7. Public provision and regulation in water, sanitation or human settlement

61. This review will see that services associated with water, sanitation and human settlement play a central role in sustainable development, with access for all to quality services fundamental to the human dimension. This area has major implications for the 2004 review of poverty and exclusion, and the quality of government action. It must also consider how to reform the public sector in all the theme areas. Lessons can be drawn from such successful public water systems as those in Debrecen, Tegucigalpa, Odi, and SABESP (São Paulo State-owned water

company). International financial institutions must be encouraged to move more resources into the public sector, and to stop promoting privatization. Capital markets have now become more creative in devising new mechanisms for investment. The role of the private sector in general must be more clearly defined, as falling in the area of building new systems, and providing bricks, mortar and other infrastructure. However, the private sector is not equipped to integrate and be responsive to the myriad social issues that water supply and sanitation must deal with.

8. True partnerships for vital services

62. There is a growing awareness that the public sector must find new ways of meeting the Millennium Development Goals for water and other areas. A lack of financial resources presents the biggest obstacle, and perception remains that the private sector can make private capital flow more readily. There is considerable evidence to show that this does not occur to the degree claimed by its proponents. Therefore, more attention must turn to public finance mechanisms; e.g., water bonds, sub-sovereign guarantees to public utilities, etc. ODA will remain important, as will international financial institutions assistance, but these must not impose conditionalities that involve privatization.

63. Worker participation remains a key, as the vast bulk of the specialized knowledge for delivery of public services exists in the workforce. Not only are workers essential partners to change; they are also consumers, family members, and community activists. In addition, workers in industrial plants are the ones best able to assess and find solutions to unsustainable patterns of industrial consumption and pollution of water and sanitation. There is every reason to consult them.

9. Instruments to extend workplace gains in sustainable development for supply chains

64. Sourcing companies should require that suppliers and subcontractors observe minimum internationally recognized labour standards. Where companies use a code of conduct to implement this strategy, they should use the ICFTU/GUF (Global Union Federations) *Basic Code of Conduct covering Labour Practices* (1997) as a basis. The provisions of this code can be adopted by any company doing business internationally, whether in manufactured products or services.

10. Instruments of social protection and justice

65. The review at the current session of the Commission provides an opportunity to take action against the growing deficit in social protection around the world. It should draw attention to the majority of the world's population that has no form of statutory social protection, and consider ways to achieve worldwide progress towards four pillars of social protection: i.e., health care, unemployment insurance, pension and education for children. The world's economic system is globalized; it is now time to globalize social justice.

66. The Commission must ask for greater coherence and uniformity in the myriad of standards, procedures, and programmes, for stronger regulatory regimes nationally and internationally to re-establish standard-setting and administration as core government functions. In addition, it must call for independent monitoring to include workers and others, and counter the tendency to tie social responsibility to a "business case".

11. Addressing discrimination, exploitation and exclusion of vulnerable groups

67. This review should conclude with a call for equity as an important element of the social dimension. As concerns youth, for example, countries should be asked to ensure that youth are provided a secure and healthy future, including an environment of quality, improved standards of living and access to education and employment. Children everywhere, boys and girls alike, must be able to complete a full course of primary schooling and have equal access to all levels of education. This review must therefore call for greater content and support for efforts to provide the vulnerable groups everywhere with the keys to a sustainable future.

12. Multilateral institutions and instruments in the social dimension

68. Globalization requires appropriate international institutions and initiatives. The ILO, for example, can make important contributions to social dialogue and tripartite consultation, in its leading role as a standard-setting organization for the world of work. A priority must be the forging of a broad political consensus as the basis for a democratic system of governance, in which there is respect for fundamental rights of workers and citizens. For this to occur, global institutions such as the IMF, the World Bank and the WTO must cooperate more closely with the ILO and the rest of the United Nations system, to ensure that trade and natural resource play a positive role. Such objectives as debt relief, democracy, environmental protection, poverty eradication and decent employment can be achieved as part of a wider, far-reaching agenda to reach development and higher living standards for all people, in accordance with the objectives of the WTO. In addition, WTO agreements must not undermine the rights of democratic governments to conduct their own education, social welfare and public investment policies, and progress with due regard to the capacities of smaller and poorer countries, and developing countries. Environmental and social concerns must be incorporated fully and the scope of the Trade Policy Review Mechanism expanded to include relevant environmental, gender and social concerns, including respect for core labour standards, with involvement of the ILO.

69. *Global unions call on international financial institutions to promote social development.* Noting that the world economy is in a more precarious situation than it has been for years, Global Unions called on the IMF and World Bank, at their Spring 2003 meeting, to play key roles in designing and applying a global stimulus plan to provide decent employment and improve living standards for those of lowest incomes. (See: ICFTU, TUAC, GUF's, *A Global Stimulus Plan: Role of the IFI's to Avoid World Recession and Promote Social Development*, Statement, April 2003.)

13. Defining a leading role for Governments in sustainable development

70. The growth of corporate social responsibility and privatization of public services has seen a transfer of responsibilities away from Governments and their international agencies. Trade unions are therefore asking the Commission on Social Development to recommend a leading role for government, and a strengthened public sector. A reassertion of the role of government could only invigorate our common efforts to achieve sustainable development on behalf of the human beings who inhabit this globe.

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Addendum

Contribution by local authorities**

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Water, sanitation and human settlements: local action

I. Introduction

1. Local governments are key stakeholders in the achievement of the Millennium Development Goals. Local governments are using various tools and implementing strategies to achieve local sustainability.

2. However, local governments are concerned about the slow process of decentralization and its implications on pro-poor governance. Local governments are concerned about the lack of awareness of the implications of privatization of services and the absence of solution-oriented dialogue between various spheres of government and other stakeholders. These concerns manifest themselves, as was noted in the process leading up to the Johannesburg World Summit on Sustainable Development,[1] in poverty, insecurity and violence, environmental degradation and in exacerbation of the impact of disasters (both natural and man-made). These are key barriers to sustainable development. At the twelfth session of the Commission on Sustainable Development, the International Council for Local Environment Initiatives (ICLEI) wishes to continue to emphasize these points and believes that any progress made needs to be assessed against these barriers to local sustainability.

3. Local governments also noted, in Johannesburg, that progress can be made to address these barriers by creating viable local economies, just and peaceful communities, resilient communities and by improving the efficiency or reducing our consumption of resources (global common goods). Within the water and sanitation framework, this means ensuring that sustainable supply mechanisms providing affordable water for all are implemented, that local and regional conflicts over water resources are resolved, and that issues of water-demand management are addressed. Such a multifaceted programme can only be dealt with under the auspices of an integrated water resources management system. Similarly, integrated management of water and sanitation implies integrated planning and management of settlements. Local governments see the objectives of improving access to water, sanitation and housing as intrinsically linked.

4. Post-Johannesburg, local governments have convened regional meetings in Latin America, Europe, Asia and the Pacific, and Africa to examine the commitments made in Johannesburg. Governments, at all levels worldwide, are now much more conscious of their roles and responsibilities than before Johannesburg. These regional summits were unanimous in calling for the strengthening of local government through capacity-building, and for legislation and policy frameworks to support decentralization. In some of these meetings, for example most recently at the AfriCities Summit[2] in Yaoundé in December 2003 and at the World Congress of Local Governments[3] in Athens in November 2003, various local implementation strategies and tools were reviewed and debated.

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[1] *Dialogue Paper by Local Authorities — Accelerating Sustainable Development: Local Action Moves the World* (E/CN.17/2002/PC.2/6/Add.5).

[2] http://www.pdm-net.org/africites/new/eng/summit.htm.

[3] http://www.iclei.org/worldcongress/.

5. Local governments and their associations were also present at the third World Water Forum, held in Osaka, Kyoto and Shiga in March 2003. However, cities and municipalities are extremely concerned about the general absence of reference to local government in the final official documents. The follow-up to the Water Forum and other international meetings needs to be further shared with local government decision makers.

6. As in ministerial meetings, mayoral meetings have also drafted declarations and action plans, for example in Johannesburg,[4] Ñuñoa,[5] Kolding,[6] Sydney[7] and Yaoundé. These texts reflect the awareness of the need to move away from the business as usual approach. The time for long speeches and presentations is past. For the almost 800 million urban-dwellers who lack access to a safe and sustainable supply of drinking water, for the close to one billion people who lack adequate sanitation, and for the slum-dwellers, local governments wish to present concrete action points.

2. Water and sanitation

7. Local governments face the following challenges:

(a) Access to international, multilateral and bilateral finance for infrastructure is very limited. In many regions this is related to foreign exchange risks and the inability of local governments to create a package to attract competitive rates for finance;

(b) Particularly in cases where decentralization and water sector reform are being undertaken simultaneously, it is not surprising that many local decision makers fail to understand what the expectations are for a sustainable service delivery;

(c) The impact of service provision (or the lack of it) on the lives of women and men is different. From a local government perspective, effective and efficient tools to deal with gender issues in delivery of water and sanitation services are still not widely available;

(d) The processes and tools for the sustainable supply of water and sanitation, which may include various forms of partnerships and even privatization of the services, are not readily available. The current understanding of these mechanisms in local political circles is extremely limited and the consequences of poorly informed decisions can have serious long-term consequences.

8. Local governments therefore call for the following actions:

(a) A thorough assessment by local governments of the recommendations made by the World Panel on Financing Water Infrastructure[8] along with the development of tools and mechanisms to increase financing of local water and sanitation infrastructure is urgently needed;

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[4] http://www.iclei.org/lgs/johannesburg_call.htm, http://www.iclei.org/rioplusten/wssd_docs.html.

[5] http://www.nunoa.cl/iclei/documentos/carta/.

[6] http://www.kl.dk/koldingconference.

[7] http://www.iula-aspac.org/Index.htm.

[8] http://www.worldwatercouncil.org/download/CamdessusReport.pdf.

(b) Decentralization and the process of engaging local governments with and by other stakeholders has a direct impact on water governance. The Local Agenda 21 participatory processes[9] developed by numerous local governments worldwide need continued support at all levels to ensure that appropriate action in the field of water and sanitation is undertaken. Building on Local Agenda 21 experiences could address issues of gender and other inequities;

(c) Capacity-building of local leadership to make long-term decisions in a short-term job is crucial for the sustainable development of local infrastructure;

(d) Housing programmes that help low-income households afford better provision for water and sanitation are essential;

(e) The inhabitants of informal settlements must be provided with tenure, allowing utilities to extend provision for piped water and sewer connections;

(f) Good urban governance is a key factor. In this field we wish to recognize the excellent work of the UN-Habitat campaign promoting principles of urban governance.[10] Similarly we wish to call for further support of the Dialogue on Water and Governance launched in Johannesburg in 2002 as an implementation partnership;[11]

(g) Capacity-building of local government leaders is crucial to achieve full understanding of the implications of various options for service delivery, including privatization and partnerships;

(h) More specific information-sharing, enabling cities to learn from each other, is needed.

3. Human settlements

9. Efforts to achieve the target of improving the lives of slum-dwellers will also increase the likelihood of achieving the targets on water and sanitation. Indeed, targeting water and sanitation without dealing with access to shelter and the development of appropriate settlement patterns alone is unlikely to be a successful strategy. The concerns in this sector are very similar to the concerns raised for water and sanitation: finance, governance (including decentralization) and poverty. The current capacity-building of local governments in these areas is not adequate.

10. Local governments face the following challenges:

(a) As with water and sanitation, the mandate of local governments to deal with illegal or unplanned settlements is often unclear;

(b) Urbanization is occurring at an increasingly rapid pace. Urban populations are growing through a significant internal migration from rural to urban centres;

(c) Environmental standards in housing development continue to be poor or even non-existent;

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[9] *Second Local Agenda Survey Report. World Summit for Sustainable Development Background Paper #15.*

[10] http://www.unhabitat.org/campaigns/governance/.

[11] www.gwpforum.org/gwp/library/Governance.pdf.

(d) Homelessness and social housing problems are increasing, while expenditure on social housing is falling. Homelessness is not only a quantitative question of producing housing: poverty, safety and security also need to be addressed;

(e) A number of policy gaps related to land use and mobility planning, public transport, sustainable housing, building regulation and environmental health continue to exist.

11. Local governments therefore call for the following action:

(a) It must be recognized that informal and illegal settlements exist in some of our communities and require basic services. Service delivery should therefore be a commitment of all stakeholders, including all levels of government;

(b) National housing standards need to be re-examined to ensure that they are appropriate to the various regions. Furthermore, national support is required to ensure that the set standards are appropriately adhered to;

(c) Local involvement in national, multilateral and bilateral schemes that make housing affordable for all is essential;

(d) National development strategies that foster dialogue and cooperation between urban and rural local jurisdictions need to be developed to ensure greater regional coherence;

(e) In order to support sustainable patterns of consumption and production, formal networks of local governments to purchase goods and services (such as public transport, provision of shelter, or delivery of water and sanitation) that meet sustainability criteria should be encouraged.

4. Conclusions

12. The increasingly urbanized societies worldwide require new directions to deal with the growing deficits in sanitation, access to water and shelter. Equitable and sustainable access to water, sanitation and shelter for the poor can only be realized through strong decentralized local leadership and an informed, supportive citizenry. Transparency, accountability and inclusion, the fundamentals of Local Agenda 21 processes, are key to achieving the Millennium Development Goals.

13. The international community is not as engaged in urban as in rural issues. This has to be of concern to everyone given that the majority of the world's population will soon be living in urban settlements. A balanced focus on meeting the needs of both rural and urban-dwellers is required.

14. Local governments can and will perform, but they need the active engagement and support of all stakeholders in order to be able to do so efficiently.